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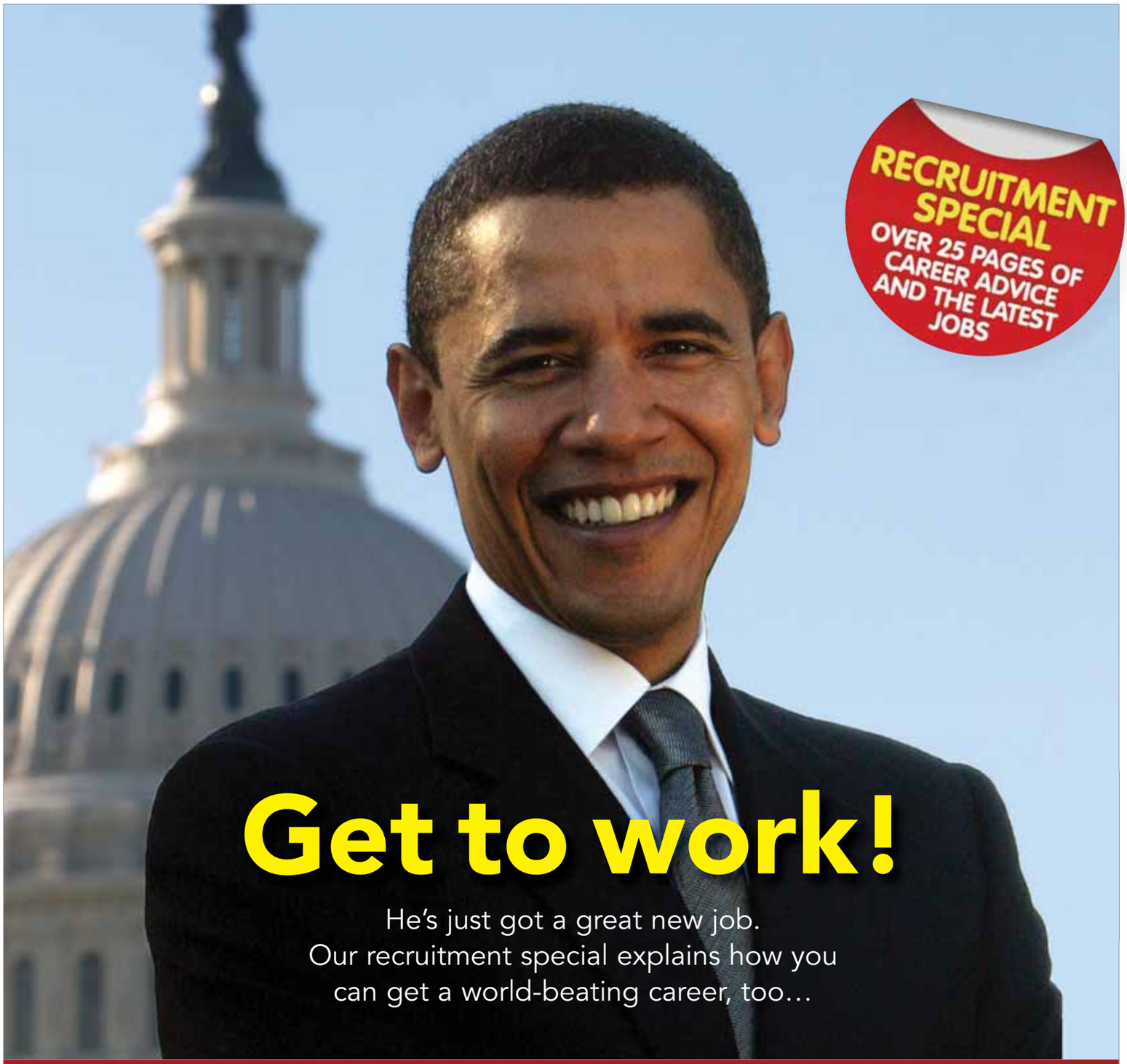

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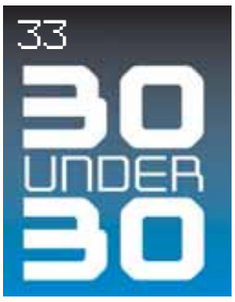

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Redundancies rocket as recession hits dev teams

Job market shrinks as credit crunch takes as a bite out of studios ● 2,000 development jobs cut in last quarter

by Michael French

The games job market has shrunk by up to a third as publishers and developers cut back on resource in the recession.

That's according to leading names in the industry and those handling recruitment at studios in the UK, Europe and North America.

In the past four months both leading publishers with vast internal development resources and independent studios have made cut backs or redundancies – with some studio closures, too (*see 'Jobometer'*). The cuts come as the global recession piles pressure on companies up and down the games industry value chain and the wider technology market in general.

PlayStation parent Sony said that it would lay-off 16,000, although none of these are in games; Microsoft said it will lose 5,000 jobs in the next 18 months (reportedly including 30 per cent of its game testing division); Intel also reportedly cut up to 6,000 staff across its engineering facilities; and Nokia said it would drop 1,000 staff as well.

"It's tough out there, and we've had to be very careful about how we'll grow our business in terms of staff this year," the head of one large global games developer told *Develop*. "It's not a dire situation, but publishers are being more conservative, at least at the start of 2009. That's reflected in the products they are developing internally and commissioning – and in their own cut backs."

Over 2,000 jobs have been cut at studios across Europe and North America in the past four months – and that's just the official figures. It's likely other unannounced or unconfirmed redundancies boost the number further.

"There are about a third less positions available compared to this time last year," added one recruiter.

"It is obvious that all studios are a lot more cautious – especially larger publishers with studios spread across the globe."

For those thinking of moving job, that means the job market has just got more competitive – while, in a sense, employers now have more candidates to chose from.

"A larger number of companies that are pushing forward with their internally-developed projects and IP still need to be bolstered with the right people," added another recruitment exec.

■ *If less opportunities mean for a tougher recruitment climate, our career special can help. The set of features looking at the job market, finding a new job, acing an interview and more begins on page 21.*

JOB-O-METER: THE PAST FOUR MONTHS

Date	Studio/Publisher	Jobs Lost	Reason
OCT	Silicon Knights	26	'Temporary' cut backs
OCT	Avalanche	77	Project cancellation
NOV	THQ	250	'Realignment towards quality products'
NOV	WildTangent	20	Risk & cost of development
NOV	Cyan Worlds	50	Consolidation, loss of contracts
NOV	Midway Chicago	30	End of project lay-offs
NOV	Gearbox	25	'Adjustment of internal strategy'
DEC	Midway	180	Cross-company cost-cutting
DEC	Free Radical	40	Studio went into administration
DEC	EA	1,000	Tiburon, Black Box and other cuts planned
DEC	Aspyr	12	'Current economic environment'
JAN	Oxygen	14	Publisher ditching internal development
JAN	Gusto Derby	16	Company cut backs
JAN	Crystal Dynamics	30	'Refocusing studio resource'
JAN	Blimey!	None	Studio staff rescued by administrator
JAN	Atomic Planet	0	Cost-cutting
JAN	Kuju -	15	Cut backs
JAN	Microsoft ACES	90	Part of wider Microsoft cuts
JAN	EA Black Box	200	Cuts part of wider EA losses
JAN	Sensory Sweep	200	Studio reportedly closing
JAN	Eidos Manchester	14	Cost-cutting

Editorial

Talent no-show

To say we encountered resistance when it came to putting together the 30 Under 30 part of our recruitment special would be an exaggeration. But we did encounter serious reluctance from some quarters.

Sure, everyone has their reasons to decline that kind of exposure or deflect it from their staff. 'Politics' was a common and understandable reason – games are a young industry, and every studio with over 100 or 200 staff almost definitely has a dozen egos that they don't want to unnecessarily bruise over a magazine feature. And games are also a collaborative industry; singling one person out of hundreds can be unfair.

But by that same regard, it's individuals that make up the constituent parts of any collaboration, so it was a shame to hear some employers use 'fear of headhunters' as a reason not to take part.

Sure, your employees are your greatest asset, so you must protect them. But this excuse always seems to carry another implication with it: 'We don't want to draw attention to our staff in case they wise up once they get a better offer.'

Neglecting to promote good talent, or boast that you have it, seems to be a mistake. Conversely, this attitude has driven the indie games market, as developers leave the 'safe' confines of big anonymous studios to work on smaller projects – which, coincindentally, garner them glory all for themselves.

Perhaps it says a lot about the confidence (or lack thereof) of British games development when firms from all over the country send in multiple submissions, yet the neighbours of many call 'headhunting' and don't bother. Which isn't to say that studio bosses are ruining their employees' careers – but it's uncomfortably close.

And when our salary survey reveals that perks and bonuses seriously do matter to staff above and beyond their salary, that's worth being aware of.

Michael French
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Develop Conference

Key UK developer event revamps opening day to embrace brand new

by Ed Fear

The Develop Conference is set to expand its coverage by examining include new trends in development for the 2009 showing in Brighton.

The conference, which takes place between July 14th and 16th at the Hilton Metropole hotel in Brighton, will see its first day's conference plan revamped, swapping the Develop Online and Develop Mobile industry-specific tracks for the all-in-one Develop Evolve, a series of sessions focusing on the evolutions taking place in games development.

New frontiers such as console digital distribution, gaming on social networking sites, and the ever-growing casual gaming industry have changed and broadened the playing field for developers, and Develop Evolve seeks to inform and provide a forum for those at the bleeding edge of these new markets.

"New frontiers such as social network and casual games have changed and broadened the field for developers..."

"Things that were fringe just a couple of years ago – such downloadable content, microtransactions, social gaming, and meshing your game with Internet services from Facebook to Youtube – are moving to centre stage," explained Develop Conference advisory board chair Owain Bennallack.

"It no longer makes sense to ghettoise sub-sectors like online, casual and mobile. In the post-*LittleBigPlanet* world, we're all mainstream game developers now."

The Tuesday, July 14th event is split into three strands – coding and production, art and design, and business – with more general interest and cross-discipline topics taking place on the Wednesday as a track within the main conference itself.

The changes have come from discussions with the conference's advisory board, which includes some of the UK's biggest and brightest development studios,

set to Evolve for 2009

opportunities, emerging technologies and trends now open to developers

including stalwarts such as Traveller's Tales and new game-changers like PlayFish.

"There's a tectonic plate shift going on in the games industry. As the latest generation of consoles are approaching maturity, there is a behind-the-scenes explosion going on in connectivity, social game play, games-as-a-service and new kinds or platforms like social networks and the iPhone," said Kristian Segerstråle, CEO of PlayFish.

"Games have always evolved – with new technologies and platforms, new audiences and new ways to play," added Jonathan Smith, head of production at Giant. "The Evolve stream acknowledges the dramatic wealth of opportunities and challenges opening up with the escalating interconnectedness of our networked lives."

Something of a brave new world for developers, embracing connectivity brings up not only considerable design challenges but also requires a knowledge base and skillset far beyond any traditional boundaries, meaning that studios can be left feeling lost with their current ways, explains MGS Europe's Kieran Connell.

"How do we integrate our games with sites like Facebook in a meaningful way? How do we create compelling mobile experiences that keep our players interested and involved in our games wherever they are? These are all interesting and challenging questions for developers and publishers but we're not necessarily equipped to answer them on our own.

"The Evolve strand of the Develop Conference is a chance for those people at either ends of our industry, and everywhere in between, to come together and learn something from each other and, hopefully, be inspired to start crossing that gap to create the next iteration of online, social, connected gaming."

The range of passes available for Develop 2009 has also been revamped and simplified, with one, two and three day passes now available to provide the most flexibility.

"Video games are evolving, which means the way they are developed is evolving," said Andy Lane, managing director of Tandem Events.

"The Develop Conference philosophy has always been about helping today's developers to make better games and reflecting what's happening in the market place. As organisers, we're keen to ensure that the issues and topics addressed at the conference stay every bit as relevant and inspiring as they always have been.

"We've worked closely with our advisory board who represent some of the best of UK developers, plus taken on board feedback from delegates themselves, to come up with some exciting changes for Develop 2009."

www.develop-conference.com

The Develop Conference will address new frontiers in games development say advisory board members Segerstråle, Smith and Connell (inset, left to right)

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David lauds key Uniting tech

Renderware creator David Lau-Kee joins Unity as chairman, talking up low-cost engine as industry's future

Lau-Kee says Unity is at home amongst developers of all sizes

by Owain Bennallack

After a year's sabbatical, former Criterion president and CEO David Lau-Kee has returned to development, taking up a non-exec chairman role at Unity Technologies.

The man who invented Renderware will lead the firm, loved by developers for its low-cost game engine, through 'rapid, global growth'.

Unity's eponymous editor software has garnered much respect for its ability to deliver content easily through the web. After successful introductions of its technology for Mac and iPhone, a Windows version of the engine is due for imminent release.

It was Lau-Kee's research in the early 1990s which lead to the invention of Renderware, which soon became the most popular middleware offering during the previous generation of consoles – and he told *Develop* that Unity is poised to spark another step change in the way developers rely on technology.

Unity is part of a new trend in the creation of games which marks the coming end of "the graphics arms race," Lau-Kee said.

"Who cares about the miniscule rises in the visual quality high watermark that we've seen over the past few years? Wii players don't. Nor do the millions downloading iPhone games, or the vast majority of PC users, and nobody on the web does.

> ***"The idea of a creator-consumer provides a fantastic foil to over-polished, inappropriately focus-tested blandness..."***

"The fact is, we've crossed a threshold now where the value of improved visuals is swamped by the creative opportunities that arise from opening up access to content and delivering it in a less regimented fashion, co-existing and mixing with all the other content, media and social networking channels that people deal with in their lives. It means we have to be much less precious about games, and that's a fantastic thing in my view."

He added: "There are increasingly blurred distinctions in the industry's traditional value chain including, most relevantly, the distinction between publisher, developer and player. I love the idea of a player-creator or creator-consumer. It makes the games industry interesting again by providing a fantastic foil to over-polished, inappropriately focus-tested blandness."

Along with the Windows version of Unity, Lau-Kee has plenty more to unveil in the future: "You'll see us enabling our community in some extremely powerful ways, but we're not ready to discuss that just yet."

www.unity3d.com

Read the full Lau-Kee interview at www.developmag.com/interviews/329/One-for-All

DEVELOP DIARY

YOUR COMPLETE GAMES DEVELOPMENT EVENT CALENDAR FOR THE MONTHS AHEAD...

GDC 09
March 23rd to 27th
San Francisco
The Game Developer Conference 2009 is the biggest gathering of the year for those making games, and returns again to San Francisco, where it will be supported by several satelitte events such as its own AI Summit.

GAME BRITISH ACADEMY VIDEO GAMES AWARDS
March 10th
London, UK
This year comedian Dara O'Briain is 'delighted' to be hosting the 2009 Games BAFTAs. Atari founder Nolan Bushnell is this year's BAFTA Fellow.

FEBRUARY 2009

CASUAL CONNECT HAMBURG
February 10th to 12th
Hamburg, Germany
europe.casualconnect.org

DICE SUMMIT
February 18th to 20th
Las Vegas, US
www.dicesummit.org

MARCH 2009

GAME BRITISH ACADEMY VIDEO GAMES AWARDS
March 10th
London, UK
www.bafta.org/awards/video-games

GAMES GRADS 09 – NORTH
March 17th
Manchester, UK
www.gamesgrads.co.uk

GAMES GRADS 09 – SOUTH
March 19th
London, UK
www.gamesgrads.co.uk

IGAMES SUMMIT
March 19th
San Francisco, US
www.igsummit.com

ELAN AWARDS
March 20th
Vancouver, Canada
www.theelans.com

GDC 09
March 23rd to 27th
San Francisco, US
www.gdconf.com

GAME CONNECTION AMERICA 2009
March 24th to 26th
San Francisco, US
www.game-connection.com

APRIL 2009

MCV INDUSTRY EXCELLENCE AWARDS
April 23rd
London, UK
www.mcvuk.com

MAY 2009

GDC CANADA
May 12th to 13th
Vancouver, Canada
www.gdc-canada.com

NORDIC GAME 2009
May 19th to 20th
Malmo, Sweden
www.nordicgame.com

JUNE 2009

E3
June 2nd to 4th
Los Angeles, USA
www.e3expo.com

GAMEHORIZON CONFERENCE
June 23rd to 24th
Newcastle, UK
www.gamehorizonconference.com

JULY 2009

DEVELOP CONFERENCE 2009
July 14th to 16th
Brighton, UK
www.develop-conference.com

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VARIABLE DECLARATIONS

by Owain Bennallack

What would happen to games in a global depression?

What if the gloomiest predictions are right? What if the global financial meltdown represents traders logically discounting the worst, as opposed to them panicking? What if instead of the recession we're in, the UK, Europe and the US is headed for a depression? This intriguing question was raised at the recent Develop Conference advisory board meeting.

Let's disregard whether a global depression is likely; even monthly columnists must concede limits to their speculation. Let's also not debate the technical definition of a depression. Rather, we'll assume we'd know one if we were in one.

Multiple bank failures and massive corporate bankruptcies, shares trading at two to three times their annual earnings or priced to go bust – it wouldn't be a pretty environment for over-stretched and under-performing games publishers. We've already seen hints of that in the market this year. In a depression, I'd expect most to fail.

CRASHING THE PARTY

The effect of a depression on households' budgets would have more profound long-term effects than the financial markets, however.

Unemployment at 25 per cent, and 30 to 50 per cent default rates on mortgages, would destroy discretionary consumer spending. Games are touted as an affordable luxury in recessions, but in a depression where people could struggle to fuel their cars or afford fruit and vegetables, the concept of a luxury would change. Even if the top 25 per cent of wealthier households, say, could still justify buying games at £40, the mass-market economics that drives the current business model would be over.

Assuming Internet infrastructure remained intact, piracy would proliferate. At the same time, advertising would dry up, pulling the rug from under countless ad-driven Internet ventures. With fresh content from other media to compete with and a widespread desire to escape from the gloom, playing games could become more popular than ever – but it's not clear who'd be getting paid, even if publishers embraced subscription and micropayment models for fail-safe DRM for new titles. There'd always be old games to play for free.

> ***"A bout of austerity might even be good for gaming..."***

$50 million game development budgets would disappear – just too risky in a cash-strapped world. Minor cosmetic updates to the likes of *FIFA* and *Madden* could still tempt out fans by offering the latest names for sports teams they'd not forsake. Otherwise, $1 million projects would be the order of the day. At this end of the spectrum, professional game development will always be vulnerable to competition from passionate, capable enthusiasts banding together to make games for near-to-free. I'd expect huge job losses in depression.

Developers have often wondered what they could do with an extra five years to squeeze the power from existing games consoles, instead of stepping up to the next generation and starting all over again. If Sony, Microsoft and Nintendo played chicken in launching a new generation of hardware through the depression, the surviving studios could find out.

Even in Japan's 'lost decade' Nintendo, Sega and Sony released new hardware, but they had the global market to bail them out of course. In a worldwide depression, it would be suicidal to spend $1 billion launching a new machine that would traditionally be paid for from royalties on uncertain future games sales, even if manufacturers assembled cheaper consoles from the innards of the latest PCs, rather than fabricating bespoke silicon.

Focusing on enhancing their software platform – as Microsoft recently overhauled the 360's UI – could be the better part of valour for hardware makers in survival mode. Similarly on the development side, gameplay innovation that requires clever design but can implemented by just a few bodies would be much more cost-effective than wowing gamers with lavish productions created with banks of costly artists. There could be a ceasefire in the production-quality Arms Race for a while.

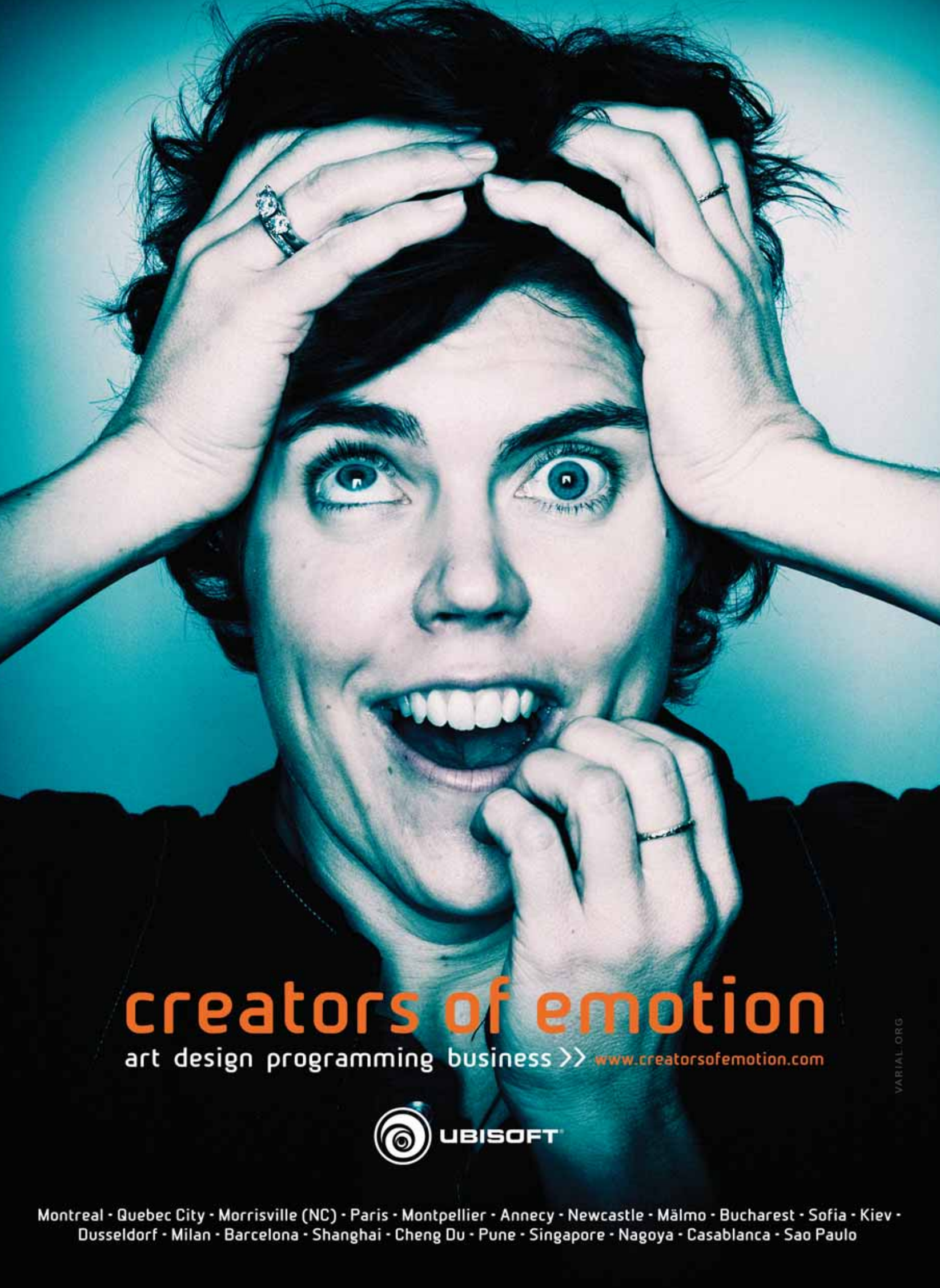
GUESSING GAME

These speculations only really amount to minor tweaks of today's established consumer economy – the 1930s collapse spawned everything from the burlesque exuberance of 1930s Berlin to the rise of totalitarianism.

Who is to say people wouldn't 'switch off their TVs and go and do something more interesting instead', as a kids' TV show used to ironically implore? In a depression, 'interesting' might mean a second job, but could an unsuspected new pop culture emerge to challenge video games? Something flesh-and-blood communal – and free – perhaps.

I suspect games would survive in some form. And although a world with no new games consoles until 2015, half as many professional developers, few blockbusters and a focus on Internet distribution and cheap community and user-focused innovation would be terrible for today's sprawling games industry, a bout of austerity might even be good for gaming.

Owain Bennallack is executive editor of *Develop*. He edited the magazine from its launch until its February 2006 issue. He has also worked at *MCV* and *Edge*, and has provided consultancy and evaluation services to several leading developers and publishers. He is also chairman of the *Develop* conference advisory board.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SMART BOMB

by Nick Gibson

Microtransaction misunderstandings

This month we continue our look at alternative revenue models by moving the spotlight to the increasingly complex and often maligned world of microtransactions. The success of the microtransaction model in Asia has been repeatedly analysed. Its adoption in the West, however, has proven contentious.

Many continue to assert that Western gamers will reject titles where ability to pay can so directly influence gameplay. Proponents of these views may be surprised to learn that, as of December 2008, over half of all MMOs launched in the West now use a microtransaction revenue model and that this proportion is continuing to grow. Admittedly, it's also true that microtransaction games still represent less than a quarter of the total market by value – although microtransaction revenues are increasing at a much faster rate than subscriptions.

The fact is that the MMO market has changed radically over the last few years. Late twenty and thirty-something *WoW* gamers are no longer the core of the Western market. The majority of MMO players are now teenagers and early twenty-somethings, strongly influenced by viral trends and drawn to easily-accessible and freely playable games. The claim that microtransactions won't work over here is simply incorrect: microtransaction MMO players already represent over 65 per cent of total monthly MMO players in the West.

The economics of microtransaction MMOs are fundamentally different to those for subscription MMOs. While between 75 and 95 per cent of subscription MMO players will usually pay per month, typically less than ten per cent (and in many cases less than three per cent) of microtransaction players pay per month, with the rest playing for free. The average revenue generated per paying player tends to be very similar for both revenue models, although this varies significantly from player to player whilst paying durations are usually considerably shorter for microtransaction players. This flexibility is both microtransactions' achilles heel and its forte: it can reduce average revenues per user [ARPUs] to low single digit dollar levels and can result in highly unpredictable month-to-month revenues; but it also lowers the financial barriers for players, allows them to set their own spending level and provides the potential for ARPUs above those achieved through subscriptions. We have seen a number of MMOs sustain ARPUs well over $20 per month.

Shin Megami Tensei Online is one of the few hardcore-focused microtransaction MMOs

"The economics of microtransaction MMOs are fundamentally different..."

The missing component which makes the commercial rationale for most microtransaction MMOs add up is the sheer scale that comes from providing addictive but simpler games for free. Their reliance on social components can generate snowball effects to create user bases that dwarf their subscription counterparts. A subscription MMO may reach mid-hundreds of thousands of subscribers if very successful. A popular microtransaction MMO can hit several million users, and experience triple digit growth annually. For some of the longer-established microtransaction MMOs, the use of microtransactions has lead to a revenue profile that is more akin to a gambling company. According to Three Rings Design, just 10 per cent of paying players of *Puzzle Pirates* generate 50 per cent of its revenues, whilst some players have spent over $2,000 in a single month and in excess of $10,000 on *Puzzle Pirates* over their lifetime. It would take over five decades for a WoW subscription to match this spending level.

Most microtransaction titles are casual MMOs and virtual worlds, often browser based or licensed from Asia and almost invariably developed or published with budgets of less than $2m, if not less than $1m. There have been a small number of big budget microtransaction-dependent services but none targeting the hard-core MMO industry overall, a situation that we do not expect to change any time soon. Aside from the unpredictability of revenues, microtransaction games' free players would represent a major cost base for a hardcore MMO, especially one with sizeable initial and ongoing per-player hosting requirements. However, we do expect to see microtransactions adopted as an ancillary revenue stream next to subscription) for some major budget MMOs over the next few years. In addition, we expect that the uses of microtransactions will continue to expand with more titles using microtransaction-based subscriptions, for example.

Some major existing MMOs have begun to introduce microtransactions through back doors. *Eve Online*'s pre-paid subscription codes can be traded for in-game currency on a regulated exchange thus giving players the ability to buy, albeit indirectly, virtual assets using real money. This has not only boosted *Eve Online*'s ARPU beyond the usual average subscription price but has also substantially reduced the black market trade assets.

Microtransactions represent a remarkably versatile revenue model that offers substantial potential not just for MMO developers but for any developers of games featuring gameplay persistence. Few Western developers and publishers that have used them have switched to other models, and many of these companies count amongst the fastest growing in the industry. Microtransactions are most definitely here, and they're here to stay.

Nick Gibson is a director at Games Investor Consulting, providing research, strategy consulting and corporate finance services to the to the games, media and finance industries
www.gamesinvestor.com

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THE DEALS

SOE AQUIRES OCTOPI
Arizona studio Octopi is to be rebranded as Sony Online Entertainment's new SOE Tucson. The change comes as a result of the MMO specialist's aquisition of the developer, which is the creator of online collectible card game *PoxNora*. Octopi's president Dan Kopyciensky enthused: "We could not be more excited."
www.octopi.com

LIGHTSPRINT EMERGING
Global illumination solution Lightsprint has joined up to the Emergent Partner Programme, making the Prague-based middleware company's technology available as Gamebryo integration. Lightspeed has also signed up Kaos Studios as a licensee.
www.lightsprint.com

RED EAGLE SIGNS WITH EA
Californian studio Red Eagle games is to produce games and an MMO for EA based on the popular series of *The Wheel of Time* novels by Robert Jordan. Releases are planned for console, PC, handheld and mobile formats.
www.redeaglegames.com

NAVPOWER FOR NAMCO
Namco Bandai has signed up as a licensee of BabelFlux's NavPower AI middleware solution. NavPower, which automatically generates 3D navigation meshes, was used to start content development on the forthcoming *Afro Samurai* release.
www.navpower.com

SANDLOT JOINS INTENIUM
German publisher and developer Intenium has finalised a 12-game deal that will see US casual specialist Sandlot's content released through the Deutschland-Spielt web portal. Titles such as *Cake Mania* will be localised for the German games market.
www.intenium.de

EPIC AUDIOKINETIC DEAL
Audiokinetic's Wwise audio engine will now be easily embeddable into Unreal Engine 3, with the solutions provider joining Epic Games' Intergrated Partners Program. "Epic is supporting Audiokinetic directly to ensure the package is kept up to date," said Epic's president Dr. Michael Capps.
www.audiokinetic.com

DEVELOPER CHART

(NOVEMBER 23rd – DECEMBER 27th)

1 — NINTENDO

LAST MONTH 2

BEST SELLING GAME:
MARIO KART WII

As a stream of older Nintendo titles flirt with the top of the charts, the company that founded its business on painted playing cards persists with its domination. As *Wii Fit*, *Wii Play* and *Mario Kart Wii* continue to pass round the All Format top spot, the trio seem intent not to let *Wii Music* join in.

Wii

2 — TREYARCH

LAST MONTH 1

BEST SELLING GAME:
CALL OF DUTY: WORLD AT WAR

Treyarch has clearly created something very special with *World at War*, but it surely owes some of the game's success to Infinity Ward, which laid the groundwork with *Modern Warfare*. The favour has been repaid at least, with *Call of Duty 4* selling well again in the wake of Treyarch's latest effort.

PS3, XB360, PC, WII

3 — EA CANADA

LAST MONTH 4

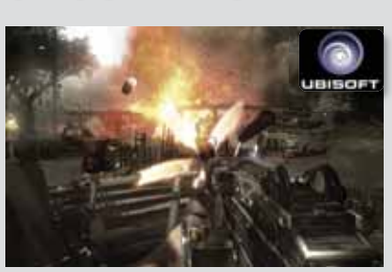
BEST SELLING GAME:
FIFA 09

Football fans are still picking up *FIFA 09* in droves, and for a fraction of what AC Milan's Kaka was going to be paid an hour for a move to Manchester City. As Konami continues to drop down the charts it seems like the final whistle has blown on the game between EA Canada's effort and *Pro Evo*.

PS3, PS2, PSP, PC, WII, XB360

4 — UBISOFT MOTREAL

LAST MONTH 7



BEST SELLING GAME:
FAR CRY II

Far Cry II might not have received the critical acclaim that many expected, but the longevity of the game's appeal to paying customers isn't in doubt, as it climbs above rival shooter *Gears of War 2* in the charts and reloads for a new round in the shadow of Treyarch's mighty *World at War*.

PS3, PC, XB360

5 — EA BLACK BOX

LAST MONTH 10

BEST SELLING GAME:
NEED FOR SPEED: UNDERCOVER

EA Black Box proves there's plenty of room on the starting grid for more than one driving game, as *Need for Speed: Underground* returns to muscle in on *Mario Kart Wii*. Like its aggressive racing title, Black Box clearly has enough attitude to assure the all important sales continue to keep retailers busy.

PS3, PSP, PC, XB360

OUR MONTHLY RANKING OF THE WORLD'S STUDIOS BASED ON UK GAMES SALES

CHART KEY

NEW NEW ENTRY	UP
INDEPENDENT	DOWN
	NO MOVE

6	↑ LAST MONTH 8	**TRAVELLER'S TALES**	LEGO INDIANA JONES	PS3, PS2, PSP, PC, XB360, WII, DS
7	↑ LAST MONTH 14	**SEGA**	MARIO & SONIC AT THE OLYMPIC GAMES	WII, DS
8	↓ LAST MONTH 3	**EPIC GAMES**	GEARS OF WAR 2	XB360
9	↑ LAST MONTH 29	**CRYSTAL DYNAMICS**	TOMB RAIDER: UNDERWORLD	PS3, XB360, PC
10	↓ LAST MONTH 5	**BETHESDA**	FALLOUT 3	PS3, XB360, PC
11	↑ LAST MONTH 17	**NEVERSOFT**	GUITAR HERO: WORLD TOUR	PS3, XB360
12	↓ LAST MONTH 6	**KONAMI DIGITAL ENT**	PRO EVOLUTION SOCCER 2009	PS3, PC, XB360
13	↑ LAST MONTH 18	**VICARIOUS VISIONS**	GUITAR HERO: WORLD TOUR	PS2, WII
14	NEW LAST MONTH -	**INSOMNIAC**	RESISTANCE 2	PS3
15	↑ LAST MONTH 16	**MEDIA MOLECULE**	LITTLEBIGPLANET	PS3
16	↑ LAST MONTH 61	**SONIC TEAM**	SONIC UNLEASHED	WII, XB360, PS3, PS2
17	↓ LAST MONTH 10	**YUKE'S**	WWE SMACKDOWN VS RAW 2009	PS3,PS2, PSP, WII, DS, XB360
18	↓ LAST MONTH 15	**EA REDWOOD SHORES**	MYSIMS KINGDOM	WII, DS
19	↑ LAST MONTH 27	**MIDWAY**	MORTAL KOMBAT VS DC UNIVERSE	XB360, PS3
20	→ LAST MONTH 20	**NAMCO**	FAMILY SKI	Wii

Chart Comment

This month's developer chart covers the all important Christmas shopping period, and it turns out that Nintendo customers have been squeezing in a great deal of last minute present shopping.

Meanwhile, Bethesda seems to have sold most of its copies of *Fallout 3* to punters who shop early, as this month saw the studio drop five places to number ten in the developer chart, swapping places with EA Black Box, which has seen *Need for Speed: Underground* thrive.

Sonic Unleashed, which the critics have both panned and praised as a game that is one part a return to form and one part a step in the wrong direction, is clearly winning the affections of the public, and has helped Sonic Team climb 45 places to the number 16 spot. Whatever the game's failings, Sega's studio has made something finacially viable.

> ***"Sadly, it's not been the best month for indie studios..."***

Sadly, it's not been the best month for indie studios, and though Insomniac have debuted at number 14, the other independents in the chart have seen their standings slip.

Back at the top positions, again the usual suspects continue to dominate, switching back and forth, but what stands out this month is just how much Nintendo dominates. Last month the percentage of the market that separated Treyarch and the console manufacturer was barely perceivable, but over Christmas Nintendo gained an astounding lead on its rival developers.

Now the wilderness of 2009's opening weeks is upon us, and as a smattering of big titles like *Street Fighter IV* ready themselves for release, things could change drastically over the next month. But as it is, there's been little change in the developer chart.

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BETA SPECIAL

CAREER GUIDE

OUR IN-DEPTH GUIDE TO LEVELLING UP YOUR VIDEO GAMES INDUSTRY CAREER

Job market overview p22

Salary Survey: The Figures p24

Salary Survey: The Analysis p26

How to get a job in coding p29

How to get a job in art p30

How to get a job in production p30

30 rising stars of development p33

The seven types of people to avoid p41

The (occasional) perks of the job p42

DayOne

One day, *you'll* make the perfect career move...

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Let's face facts: you're sick of your job. Maybe it's because you're slogging your guts out but nobody's noticing, or you're sick of working in a fractured work environment. Maybe you're battling against immovable beauracracy, or a boss whose moods are wearing thin. Whatever the reason, you want out, and you want out now.

If what we've described is something similar to your daily inner monologue – and there's every chance that it might be – then you're probably thinking of looking elsewhere. But with the economy suffering a catastrophic facepalm that, if we believe some of the more alarmist sections of the press, is going to stay with us beyond this year, is it really the best time to be looking elsewhere?

"There is no doubt that the global economic situation will have some impact on the games industry job market in 2009," says Gamesrecruit's Adrian Brown. "This is inevitable, especially for those companies that have other interests outside of the games industry, but also for any studio that relies on borrowing or external investors. I would say that, looking at the overall picture, there are about a third less positions compared to this time last year. It is obvious that all studios are a lot more cautious – especially larger publishers with studios spread across the globe."

> ***"There is no doubt that the economic crisis will have some impact on the games industry job market in 2009..."***
>
> ***Adrian Brown, Gamesrecruit***

A quick glance at our lead news story is enough to ram home the reality of the situation, however: a significant number of developers, both in the UK and abroad, are slashing headcounts in an attempt to ride out the economic turmoil. And those are the lucky ones that manage to avoid capsising altogether – let's not forget the fate of Free Radical, Oxygen Studios or Gusto's Derby studio.

Stig Strand, head of games recruitment at Amiqus, is slightly more optimistic. Although the market has experienced closures, there are still "a larger number of companies that are pushing forward with their internally developed projects and IP, and as a result their games development teams still need to be bolstered with the right people," he explains. "This means more programmers, artists, designers and producers are all still in demand going into 2009 – although to a lesser extent than last year."

What all of these redundancies does mean, however, is that there's going to be an awful lot more competition for each job out there – which could pose a problem for many jobseekers, especially those who've not kept up on the latest developments in the industry. On the other hand, it means a significantly richer talent pool for studios to recruit from. "The past difficulties of finding certain skills and experience have all but disappeared," says Brown. "I'm confident that anyone with talent should have no trouble finding something pretty quick."

GET **YOUR MESSAGE** OUT THERE

Crunch

With the world bracing itself for turbulent times ahead in 2009, is it really the best time to be looking for a new job? **Ed Fear** caught up with the games industry's recruitment agencies to divine their forecast for the year ahead…

Culling staff from studios also has the side effect of making your leftover employees that much more valuable, particularly those highly-skilled experts in their field. As such, making sure that you keep hold of them is increasingly important, tieing into the increased number of developers offering their staff extra bonuses (*see our salary survey for more*).

James Grant, director of Day One Recruitment, is clear on the possible danger of overlooking those added extras. "It's a competitive market, and if you look to cut corners as a business by not going that extra yard for your best staff that sends out a dangerous message of mediocrity to your employees. They will question why they should commit their time and energy to a company that does not seem to reward their efforts, and they will inevitably look elsewhere and potentially join a company that does."

And yet, it's equally as important to remember that a lot more emphasis is now placed on working conditions and quality of life, especially as the industry starts finding itself getting older. "The reality is that some candidates value other things more highly than perks," reckons Aardvark Swift's Ian Goodall. "Things like work/life balance, the overall quality of games the company produces, the specific genre of title they will be working on and the financial stability of company. There are many issues that companies need to address but, if they can improve on them all, they will have an edge over competitors."

> ***"Cutting corners by not going that extra yard for your best staff sends out a dangerous message of mediocrity…"***
>
> ***James Grant, Day One Recruitment***

One thing that cash-strapped studios might look to cut back on is agencies themselves – although that's likely a trend that would have continued onwards anyway, recession or not.

"There were a lot of puzzled looks eight years ago when I first approached studios and publishers to talk about making their own pro–active steps in recruitment," remembers Gamesrecruit's Brown.

"Apart from a few studios and some of the larger publishers, the majority relied upon agencies to recruit everybody from receptionists to QA and beyond. In the past few years studios have actively taken steps to recruit for themselves either through advertising online and offline, using social networking sites or employing their own internal recruiters to find people direct. At the very least, games companies are able to fill graduate and junior vacancies without having to pay agency fees."

Amiqus' Strand has also noticed the change: "Games companies have really pushed their internal referral schemes over the last 12 months. In an industry that is as small and niche as the games sector, networking and successful referral taking is very common in companies with established HR functions, and is a great way to build successful teams based on hiring staff with proven track records."

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develop

QUIDS IN?

Last month, games industry professionals that read developmag.com and mcvuk.com were invited to take part in an extensive salary and career survey. 528 people, from all sectors of interactive entertainment, took part. Here, **Michael French** analyses the answers given by developers…

AVERAGE ANNUAL GAMES DEVELOPMENT SALARY:

£30,442

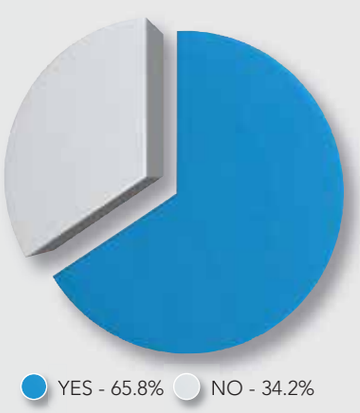
This number is actually fractionally lower than the industry average of £31,655. But still, £30,442 is a good £5k higher than the annual average salary in the UK, which is £24,908 according to the Office of National Statistics.

This number is calculated from the data given by developers amongst the 528 respondents filling in our survey (around two thirds). We've gone for a median average of the data rather than a mean average (which would include the handful of very senior execs who kindly took part as well). Factoring those high-flyers back in, and the average raises, up to £34,347 a year.

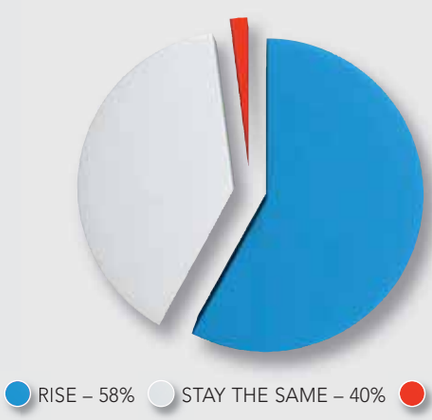
A full breakdown of average salaries by role can be found over the page.

FUTURE PROSPECTS

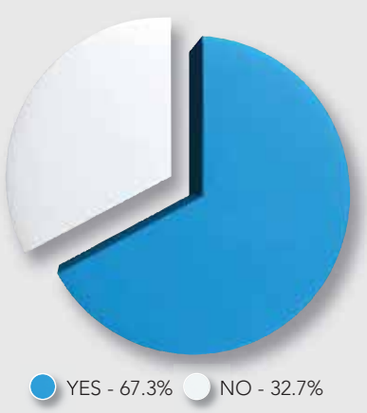
Are you satisfied that your salary covers your cost of living?



In the next 12 months do you expect your salary to rise, fall or stay the same?



With regard your current work situation, are you feeling confident about 2009?



FROM THESE results, it seems that developers are a more optimistic lot than the rest of the industy.

For all three of the above charts, the developer-only results are each a few points higher than the industry averages, which slightly weighted towards the negative answers.

But of course, the data could shift a lot when we ask readers these questions next year. The 40 per cent of respondents who said they thought their wages covered the cost of living might have come to contrary conclusions if inflation during 2009 undermines the value of their annual wages.

And despite the spate of studio closures in the last six months, it seems developers are also upbeat about the year ahead, with two thirds saying they were confident about their prospects in 2009.

"I feel my position is safe and that I am appreciated within the group I work in. I work for a large company that has seen layoffs, but I don't expect to be one of them," was a typical comment supplied with one response. "I'm not expecting a pay rise in the current climate, but I may move to the US to work again within a year or two, which would provide a higher standard of living."

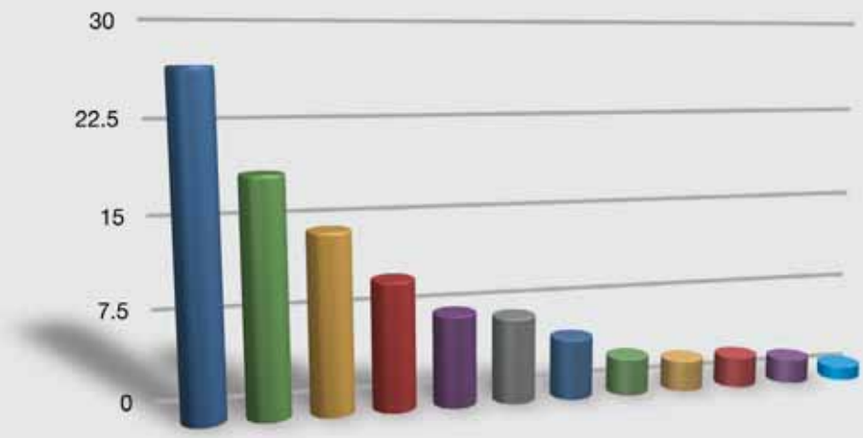
One reader also predicted that, in the face of smaller budgets, it will actually be outsourcing firms and freelancers that benefit. "I feel that more companies are using contractors in the short term to avoid overheads associated with keeping permanent staff when projects are canned or completed," they said.

Another added that, even if faced with redundancy in a temperamental time for game production, they were still confident about their job prospects: "My employer is well-differentiated from other third party developers and we are frequently approached with work. But even if things go badly with my employer, I am happy to try a new challenge, and even happy to enjoy investing myself in out-of-work projects."

Lastly, a female developer added: "Being female helps. My employer has given me extra bonuses and has asked me what I want in order to stick around."

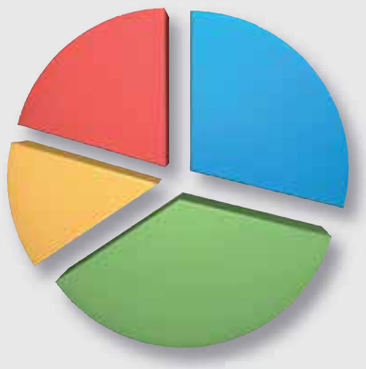
MOVING JOBS

If you are considering a change of job in future, what is the main reason?



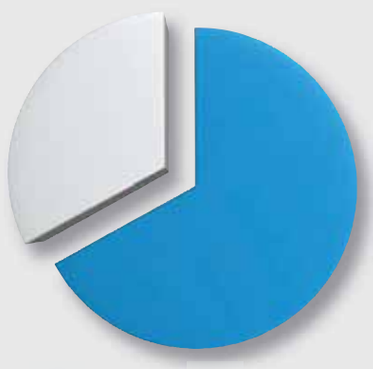
Financial remuneration	26.6%
New challenge	18.7%
Limited opportunities at current company	14.3%
Chance to move abroad	10.3%
Location change – in the same country	7.4%
Desire for broader experience	6.9%
Job status	4.9%
Promotion	3.0%
More management opportunities	2.5%
New skills	2.5%
Increased responsibility	2%
Industry/sector	1%

When are you likely to change jobs (if at all)?



THIS YEAR, 2009 – 28.7%
2 TO 3 YEARS – 36.8%
5 YEARS TIME –- 13.9%
NONE OF THESE – 20%

Are you attracted by the opportunity to work overseas?



YES – 67%
NO – 33%

BENEFITS & BONUSES

Do you receive additional benefits or bonuses over and above your basic salary?

YES – 70.6%
NO – 29.4%

Does your employer contribute to your pension?

YES – 56.4%
NO – 43.6%

THINK AGAIN about that the supposed 'haves and have nots' divide between developers and publishers. While these 'yes' percentages may be a few points lower than the industry averages reported by our sister magazine *MCV*, the results are otherwise uniform.

And clearly, reported perks like free fitness classes and health care, milestone bonuses, staff parties and the like are important to staff (or prospective staff).

Only a few, however, reported that their bonuses came from royalty shares.

Does the offer of bonuses/benefits/training influence where you would want to work?

YES – 75.9%
NO – 14%
DON'T KNOW – 10.1%

TRAINING

Does your employer provide any extra training?

YES – 33.0%
NO – 67.0%

WITH DEVELOPMENT so famously reliant skilled labour, this statistic a shocker.

The reasons probably vary from things like training being too costly and seen as a disposable investment, to some employers viewing experience as the best training the industry can supply.

But it all adds up to two thirds of developers going without the opportunity to improve their skills. And take heed: the graph on the left proves that such opportunities do matter to staff.

Celebrating Creative Excellence

Pong Pioneer Nolan Bushnell to receive Academy Fellowship!

Nolan Bushnell, one of the founding fathers of the video games industry will be flying in especially to receive the Fellowship at this year's Awards.

Tickets Available Now

Bookings are now being taken for the GAME British Academy Video Games Awards 2009, to be held Tuesday 10 March – don't miss out!

This year's Awards are being title-sponsored by specialist retailer GAME and will be hosted by Dara O'Briain. The host of Mock The Week is an avid gamer and will bring his unique brand of comedy to what will be a memorable evening.

GAME

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WHO EARNS WHAT?

CODING

Average Yearly Salaries:
Lead Programmer – £41,250
Programmer – £25,810
Junior Programmer – £18,928

ART

Average Yearly Salaries:
Lead Artist – £35,833
Artist – £29,285

DESIGN

Average Yearly Salaries:
Lead Designer – £33,330
Designer – £22,352
Junior Designer – £20,000

PRODUCTION

Average Yearly Salaries:
Lead Producer – £44,000
Producer – £29,166

AUDIO

Average Yearly Salaries:
Senior Audio Roles – £42,500
Junior Audio Roles – £26,670

QA & LOCALISATION

Average Yearly Salaries:
Senior QA role – £31,666
Mid-level QA role – £14,200
Junior QA role – £12,250
Senior Localiser – £52,500
Junior Localiser – £17,500

SENIOR MANAGEMENT

Average Yearly Salaries:
Biz Dev/COO roles – £50,000
CTO – £56,666
Creative Director – £54,285
Studio Head/MD/CEO – £90,000

NORTH & SOUTH

It's widely thought that there is a gulf between games developers in the North and South of the UK, particularly in terms of salary. Our survey both proved and disproved this conventional wisdom.

The average salary in the South of the UK was close to our overall average, at £32,362 (higher at £34,560 if you include the handful of very senior staff). As expected, that's higher than the average in the North of England (which here we mean to be the North East, North West, Yorkshire & Humberside, and the Midlands) which is almost £4k lower, at £28,779. (That number also factors slightly higher if you include management, at £29,712). For Scotland, the average is much higher than the salaries in the North, at £31,666. But if you combine North and Scotland into one more general (and Scottish Nationalist baiting) lump, the average is £30,000.

So clearly, developers in the North of England are paid less than their counterparts in the South. They are under-served in other areas, too – if you thought the statistic that 67 per cent of all developers in the UK didn't recieve any kind of training (*see previous page*) was bad, the number rockets to 74.1 per cent of developers in the North. (And it's 71 per cent in Scotland, so clearly the trend towards training is weighted towards studios in the South.)

That said, developers in the South seem like a more miserable bunch than their friends in the North. While there is a general consensus that wages mostly cover the cost of living (the 65 per cent given on the previous page is uniform across the UK's regions), developers in London are the most likely to say they are short on funds. An interesting point to bear in mind given the resurgence of games development in the Capital we reported last month.

Developers in the South are also less confident: many don't expect their wages to rise this year, and only 63.1 per cent of them said they were confident about the year ahead, compared to 71 per cent in the North and Scotland.

"40 per cent of developers in the South said they wanted to move jobs this year..."

So perhaps its little surprise that the jobs market in the South seems to be the only one where you're likely to hire good staff or find open vacancies. Of our respondants, 40 per cent of those in the South said they were planning to move jobs this year. It's a very different story north of Birmingham, however: in the North just 25 per cent of those surveyed said they wanted to move jobs this year, and in Scotland the percentage was even lower, at 20 per cent.

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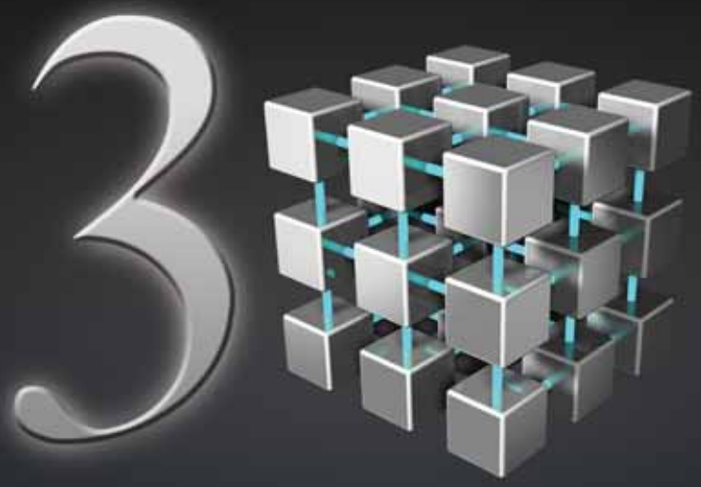

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How to get a job in...

It's all well and good to say that you could be earning more, but how do you go about getting that job? We asked three studios to tell us what they look for in a candidate…

...coding

by Tom Williams
Director of Technology, Black Rock Studio

The best hiring advice that I've heard came from Ed Catmull, the CEO of Pixar. After the release of *Toy Story*, the studio grew rapidly to meet its target of releasing an animated feature every year – and so, given the tight deadlines, they prioritised experienced candidates with skills to match the holes in their current projects.

Looking back, Catmull acknowledged their mistake: "You are better off picking people based on where they are going rather than on where they are now," he once said. "We've learned to hire based on potential rather than on position."

I'm sure most game studios have found themselves in the same situation and, like me, have made similar mistakes. In high-tech industries skills quickly become redundant, so it's far more important to hire creative people with the ability and motivation to adapt with the industry. Hiring is about the long term growth of your studio, and choosing the right candidates becomes a lot easier if you can put project deadlines out of your mind during the interview. I'm far more interested in a brilliant physics graduate, with little programming experience but bags of potential than someone who feels that they've nothing left to learn.

With that in mind, here's some assorted advice for those seeking programming jobs:

• For graduates and people new to games it is important to spend some time putting together a demo. It shows us that you're willing to work for the opportunity and gives us an idea of what you're capable of. Do some research and try something different – I see a lot of water simulations. Most importantly, make sure it expresses the kind of thing that you want to do and not just what you think we want to see. Think about the end user when putting it together and show pride in it. Make a site with screenshots, movies, executable and source code. The demo should have a single install with an intuitive and easy to use interface.

• Keep CVs simple and to the point. Make sure that you don't leave out important information because we may assume the worst. I use CVs to look for clues of how things would work out if you came to work for us. Have you kept down a job for more than 18 months? Have you been given extra responsibility? Have you worked on a variety of different tasks?

"It's more important to hire creative people with the ability and motivation to adapt with the industry..."

• If you're going to write a covering letter then make sure that it tells us something that's not already in the CV. I can take them or leave them personally, but most companies appreciate the effort.

• Expect the interview process to be quite involved. We like to get a broad range of feedback so we interview in pairs and often break things up by swapping the team half-way through. The atmosphere is casual as we want an open conversation and to get an idea of how well everyone will work together.

• When I talk to candidates I look for someone who will write great code and work hard as a team member. It's really important to find people that will put their team's performance above their personal priorities. I like to hear difficult ideas explained in simple language because it tells me that you can communicate with people who aren't from a technical background.

• We don't spend much time with technical quizzes, but we want to make sure that you are a strong C++ programmer who writes the kind of code that we enjoy working with. Most of the interview is spent talking through your experience and trying to get an idea of what you'll bring to our studio. Quite often we'll ask how you would approach a feature that we are currently implementing. That allows us to gauge your ability to think on the fly and how you go about problem solving.

• New team members come with a fresh pair of eyes, giving us a chance to beta test our creative process. So I'm happy when someone turns the tables on us and asks difficult questions. Choosing a new job is a big change and I want people to come out of the interview with a clear idea of whether or not Black Rock is the right place for them.

• Part of that decision should be based on your passion for the games that we make. Without that it is easy to lose track of the industry and the people who buy our games. I expect candidates to have done their homework and at least rented out *Pure* before the interview. We'll also ask about our competitor's games and talk about the future of racing games – I'm looking for people who are engaged in their subject with the ability to spot new opportunities in the market.

• Don't be disheartened if you don't get in first time. There are many different routes into the industry and if you want it bad enough then you should keep trying. If you do get turned down, make it a positive experience by asking for feedback and using it to prove us wrong!

www.blackrockstudio.com

How to get a job in...

...art

by Gavin Cooper
Art Supervisor, Gusto Games

Gusto Games has had a remarkably low turnover of staff over the years, but we've needed to recruit heavily for the art department in order to cope with new projects. Unfortunately, "No interview, thanks," is my most frequent response to the job applications forwarded on to me.

I've dealt with hundreds of applications for the art department in the last few years, and regardless of the seniority or experience level of the job we've been recruiting for, the submitted documents and work has varied greatly in quality, from careful and considered to careless and poorly executed. So there are some basics that I now consider to be generally important:

THE CV

• A beautifully designed CV will certainly be appreciated, but above all else, it should be well written, clear, concise and informative.
• If you're not the person we're looking for, no amount of 'creative editing' of the CV will change that fact. The usual ways of padding out the document – statements of the obvious, jargon, and exaggerations – will only reduce the chances of a successful application.
• Just write who you are, what you've done, what you can do, and maybe what you'd like to do. Generally, anything else is just unnecessary.
• Maintain a positive, factual tone. We've all had our ups and downs, but negativity and accounts of failures don't come across well. Also, a CV isn't the best place for an autobiography.
• I'm not convinced of the value of a 'Personal Profile'. I tend to skip them because they're mostly just more padding. But if you must include one it should be brief and informative.

THE SHOWREEL

• Show us some good art. This is blindingly obvious, but when recruiting for an art position it's the standard of the artwork that's being presented that really counts, so quality is more important than quantity. Present a consistently good standard, using just the best, most appropriate work and get rid of any old, irrelevant stuff. We're interested in examples that demonstrate a capability in the role applied for.
• In respect of the more junior art positions, it's understood that the applicant is unlikely to have industry experience, so good basic art skills are what's important. Most job-related skills and knowledge – such as creating artwork specifically for games – can be gained on the job.

THE INTERVIEW

• Assuming artistic ability is not in doubt, displaying a positive attitude with a willingness to communicate is important, as this will allow the interviewer to form an opinion of the applicant. Unfortunately, having no opinion in this respect is effectively the same as having a bad opinion; both would result in rejection of the candidate. Interviews can be difficult for both the interviewer and the interviewee. You have to meet someone for the first time and, in the space of a few hours, come away from the process with an opinion and enough information to make a good decision. This is very difficult if either party is withdrawn and guarded.
• An interview should be a two way process, so it can really help if the interviewee is well prepared and able to present themselves effectively. Think of some good questions concerning the role, and be ready to explain why you want the job and why you're the best person for the job.

www.gustogames.com

...production

by Russell Murray
Production Manager, Realtime Worlds

What are good things to mention in your CV when applying for production roles – and what's not good?

You *really* don't need to list much more than the basics, so on a per project basis include the project-management related activities you've been involved in such as planning, tracking, reporting, your place in the team hierarchy, and the scale, complexity and length of said project.

Any experience or training you've had with a recognised methodology is of value, too. A clear, concise CV points to the candidate themselves being organised and efficient, so try to avoid padding – it obscures the very information that could get you interviewed, and at this stage you are only trying to avoid being declined, not hired.

What skills do you look for in producers?

With the complexity and scale of projects we develop, we now look for producers to be able to do more than milestone planning and tracking and issue resolution. Producers must also be able to delegate to and drive a large hierarchy of managers to build and maintain team momentum, deal with changes in project scope, analyse and improve team working practices, and plan around project risk… and keep smiling throughout!

Are there any qualifications that you think are useful to have?

Beyond university degrees – which we do like, but certainly aren't a pre-requisite – we're seeing more and more people with qualifications in recognised project management methodologies such as Scrum and Prince 2. Whilst this does point to a candidate having an understanding of core concepts and a desire to improve skills, it's only attractive to us when combined with experience in applying it to a development project.

Regarding the interview – are you looking for in particular?

We almost always hold a telephone interview before a face-to-face interview – it's a really quick way to assess what level of skills and experience a candidate really has and it also gives us a better idea of whether and how they might fit into our team.

In a face-to-face interview we simply go back over all the skills and experience mentioned and just get the candidate talking – we look for confident and concise descriptions, and watch for the 'can do' attitude and self-awareness I mentioned previously. We are also trying to assess how keen the candidate is on the role.

Do tests play any part of interviews for production roles?

While we do set tests for artists, coders and even designers, we don't set aptitude tests for producers – we feel that we can adequately assess a candidate's experience, skills and attitude from their CV and the telephone and face-to-face interviews we hold. And in addition we strive to refine a role description for each candidate throughout the process, which in itself tells us whether there is a good fit or not. We do review every candidate after three months in the role, but we've never had a problem.

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Game Designer £DOE + Benefits SH220D

The role involves being responsible for creating game design documents for assigned projects from concept to production and through to Gold master. Must possess excellent functional documentation skills and understand what is required from designers for programmers and artists to complete work. Experience of at least 2 released titles as a Game Designer on handheld or mobile platforms is required for this role.

Email simon@aswift.com

Animator £DOE + Benefits DS220A

You should be competent in 3DS Max, and feel comfortable creating Animations from scratch where necessary. Candidates must have 2+ years games industry experience including working with Motion Capture and Rigging in 3DS Max and Character Studio. A Good knowledge of the Cinematic process and a background in handheld/mobile games development would be advantageous.

Email dan@aswift.com

Programmer £Competitive HH220F

They are looking to bring in an experienced programmer with at least 3 years of professional software development experience. The successful candidate will work as part of a game development team on a next-gen handheld videogame. Tasks will range from; A.I., in-game UI frameworks, user interaction, logic/scripting engines. etc. A familiarity with modern C++ practices such as STL or boost libraries is required. Experience in C#, managed c++ or .Net development is a plus.

Email hollie@aswift.com

Senior Tester £DOE + Benefits DJ220ST

You should have solid QA experience, ideally within the mobile games industry, and will be responsible for the testing of games for high-end mobile platforms. You will manage the testing of each game and subsequent SKUs from production of Test Plans through to final sign-off. You should be experienced across the full test lifecycle, have good Project Management and administration skills, the ability to manage a large number of small projects simultaneously. More details available on request.

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30 UNDER 30

Everyone knows the old boys in the industry, but what about the up-and-coming talent of tomorrow? Studios from all over the UK and Europe pitched their finest, but only 30 could make it through. **Ed Fear** profiles the rising stars…

SIOBHAN REDDY
Producer
Media Molecule

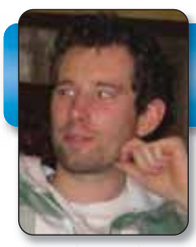
Starting in the industry at the ridiculously young age of 19, Reddy joined Criterion and steered the development of several *Burnout* titles. According to her nominee, she was instrumental in making Criterion a success, and is currently hard at work doing exactly the same thing at pioneering Guildford studio Media Molecule.

Anybody who reads an interview with Reddy can instantly see the passion and enthusiasm she holds for her projects and the industry at large, but her hard-working and professional attitude is apparently not a barrier to her being "one of the coolest and most fun people" that our little mole knows. High praise indeed.

STEPHEN CAKEBREAD
Senior Coder
Bizarre Creations

Despite being only 28, Cakebread is the fine fellow who created the *Geometry Wars* franchise. Coming up with the original concept single-handedly, he went on to create *Geometry Wars: Retro Evolved* – the most successful launch title on Xbox Live Arcade. Its sequel repeated this success, headlining Microsoft's Summer of XBLA push last year. Both games have seen over one million players between them – a big achievement for a retro-styled shooter.

As well as having design/advisory roles on *Geometry Wars Galaxies*, *GWRE* PC, and the mobile phone versions of *Geometry Wars*, Stephen is responsible for several internal tools at Bizarre Creations.



TOM JUBERT
Freelance Writer

One of the youngest games writers in the world, Tom has apparently been described by Rhianna Pratchett as one of the industry's best up-and-coming scribes. He has been responsible for the overall plotting, character design, writing, implementation and voice direction on all three of Frictional's *Penumbra* games, and is also currently working as a producer in the digital distribution space.

His character development and voice direction have been particularly praised, and he was the designer behind the unique and well-received interactive insanity mechanics in *Black Plague*. He was nominated for a Writers' Guild of Great Britain Award in 2008 for *Penumbra: Black Plague*.

ASHLEY BENNETT
Technical Account Manager
EA Online

Bennett is the sole UK-based employee of EA Online, an internal umbrella within Electronic Arts that provides online services to game teams, such as login and matchmaking technology. He works in the production team within EAO, which oversees the development of this internal tech and works with internal and external studios to help them use it.

Originally from Essex, Bennett was based in the Redwood Shores studio until 2007 when he was tasked with being the European representative, which has seen him supporting some of EA's biggest franchises directly in this timezone including *Battlefield*, *Burnout*, *Battleforge*, *Mirror's Edge* and more.

SIMON PHILLIPS
Managing Director
Gusto Games

As the managing director of Gusto Games, Phillips has seen the studio rise from a tiny startup to one of the UK's more prominent independent studios, employing 80 people. Phillips established the studio at the tender age of 24, and under his stewardship the company has excelled within its sports game niche and expanded to capitalise on deals with non-traditional partners such as Scholastic in the US.

While one of Phillips' best traits may be his fierce commitment to keeping the Britsoft spirit alive despite troubling times, we're more impressed by the fact that his co-workers say he can often be found propping up the bar at industry events – and that, most importantly, will always buy the drinks.

CHRIS DELAY
Lead designer,
Introversion

Chris is described as the 'heart and soul' of indie darlings Introversion Software – he comes up with the game ideas before designing and developing them from scratch, all while maintaining 'the highest levels of quality and creative integrity'. He started Introversion after leaving Frontier in 2001, disillusioned with the industry's focus on 'endless revisits of the same IP', and has since proved intstrumental in its rise to one of the most high-profile indie developers in the world. The success of Introversion's games comes from his steadfast determination to create games that are unique, push boundaries and that are different to anything else out there.

ARJAN BAK
Senior Artist,
SCE Guerrilla Games

Still only 24 years old, Arjan Bak is almost an industry veteran, having worked for Valve Software and Ubisoft before joining Guerrilla Games as a senior artist in 2007. Following design and art roles on *Day Of Defeat* and *Day Of Defeat Source*, and *Rainbow Six: Vegas*, Arjan has played a pivotal role on the graphic realisation of the anticipated *Killzone 2*.

In the words of Guerrilla Games' MD Hermen Hulst: "Arjan isn't just a gifted artist – he's also mature and experienced enough to lead a team. He is acutely aware of the commercial context of a game project, as well as all the idiosyncrasies of the main disciplines in game development. Quite rare for a 24 year old."

LUKE HALLIWELL
Technical Lead of R&D,
Realtime Worlds

A graduate of Maths from Cambridge University, Halliwell worked at VIS Entertainment before joining Realtime Worlds in 2004. Quickly rising to become technical lead of the company's R&D department – one of the key roles in RTW's development headquarters in Dundee – he's responsible for maintaining the long-term vision of the company's tools and technology. That means guiding the tech work on *Crackdown*, and RTW's upcoming online title *APB*, all the while developing future versions for projects beyond that. He is now an accomplished and regular public speaker, and has become known for his forthright views on all aspects of sensible development practice.

PEDRO CAMACHO
Freelance Musician

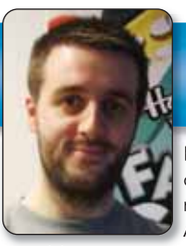
Portugese freelance composer Camacho is building quite a reputation within the game audio field, having already won an Independent Games Festival award for his work on *Audiosurf*'s title track. With an extensive background in music, including tuition under the wings of some of Portugal's most renowned musicians and composers, Camacho has deftly scored titles such as *Fury*, *A Vampyre Story* and *Sacred 2*.

Camacho is the only freelancer to be nominated by a customer: Bill Tiller, CEO of Autumn Moon, used Camacho on *A Vampyre Story* and called his soundtrack "one of the highlights of the game".

JENS NILSSON
Lead Scripter,
Frictional Games

Nilsson is one of two directors at Swedish indie developer Frictional, and one half of the reason that such a small team has managed to produce three entries in its *Penumbra* horror series, as well as secure publishing funding to develop an entirely new and even more ambitious IP in 2009.

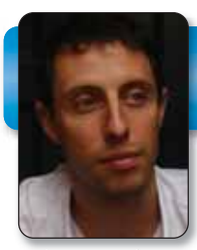
He is responsible for in-game sound, an area often singled out as an essential element in *Penumbra*'s terrifying atmosphere. And with *Penumbra: Black Plague* listed by IGN as their fourth scariest game this generation, his work is going down well. He is also the team's lead scripter and writes the company's site and regular newsletter, making him quite the all-rounder.



GLEN HAMMOND
Development Manager,
EA Bright Light

Hammond is a rapidly up-and coming development manager within Electronic Arts, despite being at the enviably young age of 24. Although still relatively fresh to the business, he has been instrumental in the pre-production of *Zubo* and the successful delivery of *Hasbro Family Game Night*. Although young, his maturity makes him a strong leader of others as he runs the day to day project management of one of EA's key Hasbro franchises.

And we're told that despite always wearing shorts – regardless of the weather – he is a valuable member of the studio team, and was voted Brightest Light in the last EA Bright Light awards.



MICHAEL FROGLEY
Motion Graphics Designer,
SCE London Studio

Mike started work with the *SingStar* team in 2006 and has since become an integral part of the team, working on a wide range of projects including UI design and animation, music videos, logo stings, game intros and game presentations.

His most recent work was storyboarding and directing the intro movies for *SingStar Volume 3* and *Singstar ABBA*, and is just finishing up work on the international TV and cinema commercials. Mike enjoys the creative freedom of his role and the opportunity to see his work in a best-selling game. He is widely known within London Studio for his artistic flair and creative vision, and we're told to expect to see a lot more of his work in future.

DAVE ALLANSON
Technical Director,
3rd Dimension Creations

Graduating with a BSc in Computer Games Programming in 2004, Allanson spent a short time in software marketing while taking part as programming lead and support in a variety of community game modification projects. Dave also spent a period as part of a QA team testing the development of a new PlayStation 2 controller and its associated launch title.

Since then he has spent four years at the helm of 3rd Dimension Creations, working on mobile games, PS2 titles and in more recent years Xbox Live Arcade, PSN and Wii titles – the most recent of which is in collaboration with Blitz Games on the upcoming *Codachain*.

ARNOUT VAN MEER
Technical Director,
Splash Damage

At the young old age of 27 years old, van Meer has already managed to ship two triple-A games. He was mod-making at 13, leading the coding team for the popular *Q3T* mod at 17, worked on *Wolfenstein: Enemy Territory* as lead programmer at 21, and shipped *Enemy Territory: Quake Wars* as technical director at around the age of 25.

Already well in to his third title, this time for multiple platforms, he now leads a team of more than a dozen programmers. He was employee number one at Splash Damage, has single-handedly guided its technology and programming team for seven years, and is now a listed company director.

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NICK SADLER
Environment Artist,
SCEE Studio Liverpool

Liverpool born and bred, Sadler joined Sony Computer Entertainment just six weeks after leaving university armed with an honours BA in Multimedia Arts and an MA in Digital Games. After working as a concept artist for *Formula 1 '04*, he was promoted to junior artist on *Formula 1 '05*, for which he put his Masters thesis – a detailed study of lighting and palette – to use in the game's environments.

In *Formula 1: Championship Edition*, he developed a technique for production of consistent-looking artwork for the driveable surface aspect of the game's 18 tracks, which led to him being entrusted with the design and production of all track surfaces for *WipEout HD*.

DAVID BRAMHALL
Producer,
Traveller's Tales

Starting his games industry journey as a QA tester, then rising through the ranks all the way to producer, Bramhall apparently has a very no-nonsense attitude towards running teams that earns him a lot of respect.

Yet, critically, we're told that he completely understands the nature of such a creative industry, and the importance of having a laugh with co-workers. "Throughout my time knowing him, he has not only been a great friend, but has also motivated me to climb the career ladder and has been an inspiration to me and pushed many people to explore their full potential," says his nominee. And with a testimonial like that, what more can we say?

MALCOM BROWN
Junior Software Engineer,
Realtime Worlds

Nominated by the organisers of Dare to be Digital, Brown lead the BAFTA-winning Voodoo Boogy team, whose game *Ragnarawk* also won the Audience Award at the Dare ProtoPlay. He was immediately recruited by Realtime Worlds as one of their software engineers and worked on different projects, where he as gained invaluable programming experience. Not content with just coding, Brown is also a musician, jointly composing music for *Ragnarawk* and additional project *Bear Go Olympics*, an entry to the Olympics Fine Arts 2008 exhibition which won an excellence award. He continues to hold an interest in creating games and music.

PAUL WOODBRIDGE
Lead Designer,
Relentless

Starting his games development career in 2003, Woodbridge joined the then-new Relentless as a junior designer on *DJ: Decks and FX*. He then shot his way to lead designer on *Buzz! The Music Quiz*, most recently working on the first PlayStation 3 installment *Buzz!: Quiz TV*. In pitching Paul as one of the 30 under 30, Relentless' David Amor said: "It's easy for a designer to go down well trodden paths, making games for gamers, but Paul understood how to make a game that would be easy for everyone to play and that was a major part of *Buzz!*'s success." He's now put *Buzz!* to one side and is working on the brand new, top secret Relentless project.

THOMAS JONES
Senior Artist,
Cambridge Studio

Jones originally joined Cambridge Studio to work on *Ghosthunter* on PS2. He was then seconded to Amsterdam in 2004 for several months to work with Guerrilla Studios on *Killzone*, earning valuable experience.

Tom returned to Cambridge to work on games such as *24: The Game*, *Medevil PSP*, *WipEout Pulse* and *Heavenly Sword*. He also linked up with Guerrilla again, working as lead environment artist on *Killzone 2* within the Cambridge studio.

Within SCEE, Tom is known as someone who thrives under pressure, with a reputation for never refusing a new challenge and, most importantly, having the ability and determination to see it through to the end.

CHERYL PRINCE
Production Manager,
SIDE

An integral part of the Side team for over five years, 29 year old Prince was instrumental in Side achieving its most successful year in 2008 with work on titles such as *Fable II*, *LittleBigPlanet* and *Star Wars: The Force Unleashed*.

Already making her mark on 2009, she has cast voice talent for games including Bioware's *Dragon Age*, Konami's upcoming *Lords of Shadow* and Guerilla Games' *Killzone 2*.

Her various esteemed clients across the development sector are often impressed with her total commitment and professionalism – all the while crucially still maintaining that all-important sense of fun.

MARK THOMPSON
Lead Mission Designer,
Midway Newcastle

Thompson joined Midway's Newcastle team in February 2004 and rose through the ranks of level designer, senior mission designer. He took the lead mission designer role in April 2008, charged with managing all of the mission content for *The Wheelman*.

According to studio manager Craig Duncan: "Some of the content he has produced himself and mentored his team to produce is breathtaking.

"To drive for perfection is one thing, but to commit yourself to do everything in your power and ability to make it happen, and iterate and innovate until the content blows everyone away takes Mark into being the best of the best at what he does."

DAN HAWSON
Principle Programmer,
Evolution Studios

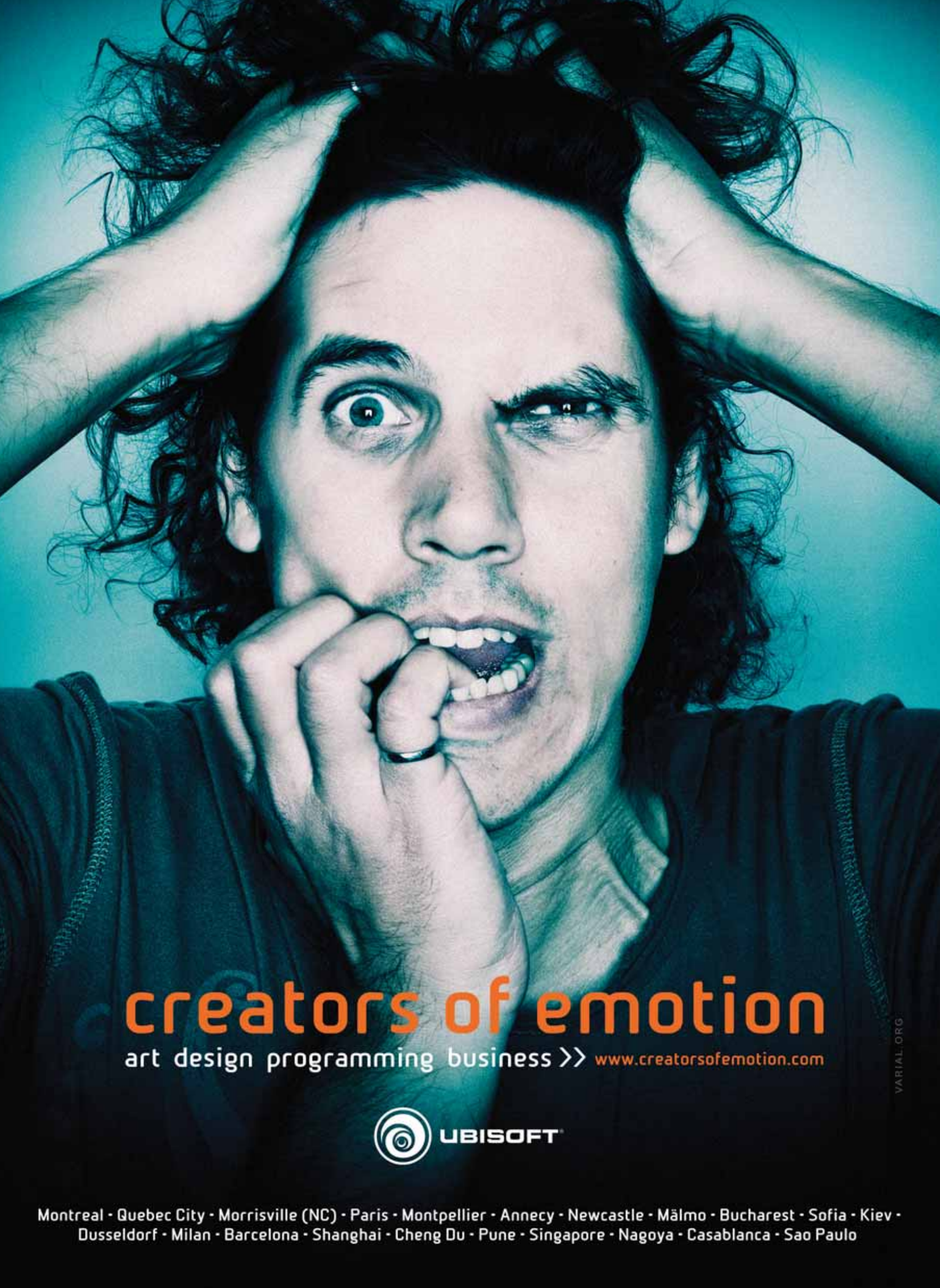
After graduating in Computer Science from Sheffield University he joined Infogrames Sheffield as a tools programmer on its core technology team.

After Infogrames Sheffield closed in 2003, he joined Evolution Studios to begin work on *World Rally Championship 4*, and then *World Rally Championship Evolved* on PlayStation 2, followed by PS3 hits *MotorStorm* and *MotorStorm: Pacific Rift*.

While his involvement has been mainly in the area of rendering, he has also become highly proficient in other disciplines including network, UI, game logic, tools, technology, audio, production infrastructure, and production processes.

RICKY WILLIS
Programmer,
NiK NaK

Despite being only 22, Willis' 18 months at NiK NaK have seen him tackle a huge number of different programming sectors – including cross platform engine development, tools, plug-in development, low level platform and high level gameplay programming, profiling, debugging, rendering, audio, Lua scripting. And he has proved exceptionally capable and reliable in all of them, says lead programmer Robert Swan: "Even amongst the many good graduates Ricky stands out. His ability to turn his hand to everything is rare and with a couple of games coming out this year, he will stand out whatever future specialisation he chooses."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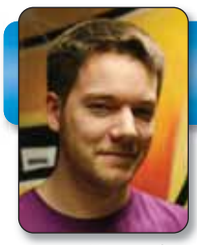


PAUL CROFT
Co-Founder and Director,
Mediatonic

Croft co-founded Mediatonic as one of two staff in 2005, and has since grown the online and social gaming firm to over 15 people with offices in London's hip Covent Garden. Originally producing smaller games to order, the firm has worked for clients as prestigious as EA, Adult Swim and Sega, creating the whole original line-up of games for the latter's PlaySega website.

A coder-turned-director, Croft is able to get right down to grass roots on any of the company's projects while still managing to steer the firm towards its first self-published, original title – and he's only 24. It's enough to make you wonder what you've done with your life.

DAVE HYND
Senior Engineer,
Ruffian

As an undergraduate, Dave studied computer and electronic systems at Strathclyde University before specialising in Computer Games Technology at Abertay. Dave was the recipient of the prestigious Graham Technology award at the Scottish University's Young Software Engineer of the Year ceremony for his thesis on cloth dynamics.

After this, Dave joined Xen group in early 2005 as a gameplay programmer on *Crackdown*, the critically acclaimed game for the Xbox 360. In 2007, he accepted a permanent contract with Realtime Worlds to work on the upcoming MMO *APB*. In late 2008, Dave rejoined Xen group shortly before the company reformed as Ruffian Games.

JEZ HARRIS
Lead Designer,
Relentless

Back in 2001 we ran a feature similar to this one, profiling the new talent for the 21st Century, and we threw the spotlight on an up-and-coming designer called Jez Harris. He confidently predicted then that "before long, we'll all be celebrities." While that might not be exactly the case right now, he is certainly carving a reputation for himself as lead designer at Relentless, having worked on *Buzz! The Mega Quiz*. He's also responsible for *The Hollywood Quiz*, *The Schools Quiz* and 'any good bits' in *The Pop Quiz*. More recently he's steered PSP game *Buzz!: Master Quiz* to number one in the budget PSP charts, and is now working on "some really good stuff that's secret."

GRAHAM GALVIN
Visual Specialist,
Denki

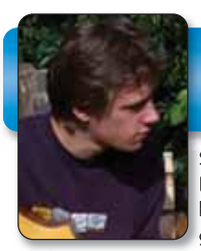
Galvin studied 3D modelling and animation at Dublin University, before going on to work on localisation art for Vivendi Dublin. Confessing that he was 'always a bit of a gamer', he moved to the UK and worked as a general artist for Zoonami, staying there for several years and progressing to the role of lead artist.

Galvin enjoys the production element of art creation and was therefore attracted to Denki's high-output model while still managing to keep its own style. He now works in Denki's TinkTank department where he enjoys the freedom to visualise both his own ideas and the concepts of the rest of the team.

PIERS COE
Environment Artist,
BigBIG Studios

Coe graduated from the Cumbria Institute of the Arts in 2002 and joined BigBIG Studios the following year, right at the beginning of the studio's life. He worked as an environment artist on the successful *Pursuit Force* and its sequel *Pursuit Force: Extreme Justice*, and contributed to the very distinctive style of the games as a key member of the effort to facilitate landscape artwork and modelling. More recently, Piers has worked on concepting and new, unannounced titles.

In the words of BigBIG studio manager Jon Webb, Coe has "always applied himself in an extremely professional and dedicated manner. He's a real star."



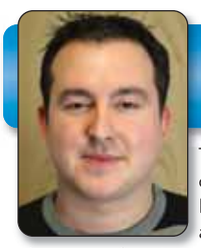
CHRISTIAAN MOLEMAN
Artist,
Arkane

Starting out by dabbling with Deluxe Paint like so many before him, and modding games like *Jazz Jackrabbit*, Moleman went on to study games animation at University of Teesside, where he graduated in 2005. For his final year thesis, where most others went the safe route, he went out on a limb and tried to come push what animation can and should mean for gameplay – a project which later became a *Develop* article. He joined Streamline Studios in Holland upon graduation and now works for Arkane Studios in Lyon. Meanwhile he has continued his animation training on his own accord, firmly committed to experimenting with animation as a means of expression.

HONOURABLE MENTIONS

30 UNDER 30

- Sean Crooks (3rd Dimension Creations)
- Bungie's 50 employees under 30 (Bungie)
- Mohit Sureka (Spiel)
- Thomas Grip (Frictional)
- Adam Capone (Streamline)
- Chris Chatterton (Qurios)
- Andree Wallin (Realtime UK)
- 'Deejay' (Binary Tweed)
- Matt Rank (Audiomotion)
- Barry Cairns, David Hynd, Stuart Campbell and Paul A. Simms (Ruffian)
- Richard Carr, Stewart Hogarth, and Tom Kronberg (Denki)
- Joe Neate (Midway Newcastle)
- Jesse Roberts (Lo-Jen)



SIMON BARRATT
Director,
Four Door Lemon

The managing and technical director of young developer Four Door Lemon, Barratt apparently taught himself elements of BASIC on the CPC6128 at the age of five, and has since self-trained as a programmer.

He joined the industry at 16 and formed Four Door Lemon in 2005. The irritatingly 26 year-old also happens to be a Pepsi addicted wannabe petrolhead with an unhealthy love for Hull City, so there's downsides to everything. In 2008 he produced and did programming on the multi-platform *Puzzler Collection*, *Football Director DS*, *Clever Kids* and other still-secret projects, as well as continued development of its in-house tools and middleware.

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7 deadly sins of games development

So this issue has praised our rising stars and the qualities that make them great. But what attitudes and behaviors, held individually or as a part of corporate culture, can be deadly? **Ed Dille** explains all…

Failure is bad. When teams fail, the failures are not isolated events; they send ripples that end up impacting us all in ways that are not always obvious – from the evolution of more onerous contract language to the need for companies to put themselves at risk to salvage a bad position created by someone else.

Some of the mistakes I focus on here should seem glaringly obvious and avoidable to experienced developers and business development professionals. But no-one has immunity, so let's examine some of these wounds together in the hopes that more of us will avoid them.

1 THE THIEF

When is the last time you audited your machines for unlicensed software? The question presumes the innocence, or at least ignorance, of management when raids occur – but most of the time everyone in the company is complicit in the use of the unlicensed software. I have heard every excuse in the book, from "XYZ should charge us less based on where we are located" to "We wouldn't be in business if we didn't do this."

But we work in an intellectual property industry; certain things are required as part of the price of admission. And those who don't follow these ethical and business imperatives are not only unfairly competing with those who do, they are also placing their companies and all of their customers at risk. Handle it just like the issue of having proper insurance certifications was handled; make it contractual and enforce it.

2 THE DOUBLE AGENT

Fear is a great motivator, but usually not with positive results. Whether you are a publisher dealing with a developer or a developer dealing with an outsourcer, if you try to get what you need through fear and intimidation, the chances are very high that you are creating Double Agents amongst your studio.

They will tell you what you want to hear, even when it isn't true. These rogue operatives stop trusting you long before you learn to stop trusting them, and very often the damage they do before they are unmasked hurts your other relationships.

Don't punish people for identifying problems and don't be afraid to do so yourself. Praise that behavior!

3 THE KNOW-IT-ALL

All too often people take on too many roles, including ones that clearly don't fit them. The most common justification given for doing so is that no one else is available or can do it. But there are other reasons as well: the need to control everything, failing to invest the time to train the folks around you who could do it if you let them, or being unwilling to invest in professional outside help.

I have seen too many game developers get tripped up by HR, legal, accounting, or other business issues because they had simply spread themselves so thin that they couldn't manage it all, no matter how hard they tried. Don't let frugality get in the way of efficiency. Take advantage of skilled contractors who can do certain tasks more efficiently than you can.

> ***"Don't punish people for identifying problems, and don't be afraid to do so yourself…"***

4 THE MAD SCIENTIST

Mad Scientists come from all walks of life in this industry, but game designers are the most notorious. A Mad Scientist is any individual who is so passionately, slavishly devoted to achieving their personal mission irrespective of the potential consequences.

Learn the lesson that babies are always most beautiful in the eyes of their creators, and don't be afraid to invoke child intervention services when necessary to regain control of a project – or kill ones that clearly should have never been born in the first place.

5 THE GLUTTON

The Glutton just doesn't know how to say no. When the famine is over, they try and store up as much as they can for the next famine. And so they over-commit their resources to too many projects and kill their quality and reputations in the process.

One kind of glutton can't say 'no' because they so desperately want to please the customer that they agree to almost any request, however impossible it may be. And there are cultural twists on this one as well. In some cultures, it is considered rude to say no and, in others, the correct way of saying it is never going to happen is to say, "It's possible." I call these the unwitting gluttons because, even though they don't mean to be gluttonous, the end result is the same: no one's expectations are met and, again, some innocent bystander is usually called in to clean up the mess.

6 CHATTY CATHY

One of the most common mistakes people make in a relationship-driven business like games development is not knowing how to manage them properly. Developers and publishers alike spend tons of their time on conversations that are not going to bear fruit. Networking with well thought out objectives and an agenda is good. Networking for networking's sake is just bar-hopping. It's a lot of meaningless conversation that is forgettable to both sides.

Don't be Chatty Cathy and waste time; be a straight shooter and ask for the same in return. Focus your biz dev efforts on conversations with real momentum and, if you don't have enough of those, either you need to reassess what you are offering or find different folks who want what you have. Going back to the same dry holes gets you nowhere.

7 THE MISER

You've all heard that it takes money to make money. No developers have unlimited resources, so you have got to learn how to manage those resources wisely. Misers threaten their long-term survival by being penny-wise and pound-foolish.

If you want longevity and success, you have to bid your projects accordingly, plan for the future, and invest in it. Invest in the right people, then invest in them further by giving them vested interests in the outcome of their efforts. Invest time in your training and developing your staff, too. Invest at least 10 per cent of your gross revenue – not your profit margin – back into research and development of your proprietary tools, technologies, and processes.

And if you say you haven't got a 10 per cent margin for this purpose, then your first investment should be in better business management and development services. You have to be in a constant state of re-engineering with the pace at which technology moves.

Misers skimp on these things in favor of short-term, lower-impact items. In doing so, they undermine their company's long-term potential.

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Ed Dille *is the CEO of FOG Studios, the world's first interactive representation agency, managing a slate of development clients and interactive rights for some of the world's top brands, including ESPN, Infogrames/Atari, Eidos, British Telecom and Berlitz.*

YOU'RE IN THE GAMES INDUSTRY

Above: 30 Rock's Jane Krakowski plays You're in the Movies enthusiastically. Left: From left to right – Andy Trowers, Rob Parker, Jane Krakowski and Nick Robinson.

Think that working in games is all about slaving away in a darkened room? Well, it is, but all that hard work can have its perks. **Andy Trowers**, lead designer on Zoe Mode's You're in the Movies, wrote us a diary of his recent promotional trip to New York…

Microsoft arranges a launch event for *You're in the Movies* and asks if we can send a crack squad of developers to provide technical support. They explain that they have hired out Virgin Megastore in Times Square and want to get people playing the game with a famous celebrity. The resulting films will then be shown on one of the big jumbotron screens outside in Times Square. It is a genius idea, and as it involves a free trip to New York City, we readily agree. Start spreading the news!

Monday, November 17th

We board our 767, excited about flying business class but disappointed that we don't get to fly upstairs on a 747. The seats are pretty comfortable, but there's not enough leg room for Nick, our technical guru. (The rumours that he was originally going to play Reed Richards in the latest installment of the *Fantastic Four* are unfounded, but apt.)

The flight is smooth and we while away the hours taking advantage of the free bar, and playing each other at the onboard quiz and poker games. The food is good, too – a cut above the mush that gets served at the back of the plane.

After about seven hours we arrive at JFK and breeze through the security at the other end. No one asks questions about the vast amount of wires and gadgets that hang out of our bags and we jump into a taxi.

We are staying at the W hotel in Times Square – very swanky, if a little on the pretentious side. We roll up to the front desk to check in. They check our reservations, tell us everything is in order, then ask for a credit card to cover the bill. Uh oh. None of us have enough of a limit on our cards to pay the rather large fee. It was supposed to be all paid for! I have a vision of sleeping on a bench in Central Park. Luckily, our friendly Microsoft PR guy turns up and settles the bill before we have to resort to such desperate measures.

We have a couple of drinks in the unbelievably expensive hotel bar and, after chatting with a crazy Irish lady who hates computer games and thinks Nick is a teenager, we retire to bed.

"As it involves a free trip to New York, we readily agree…"

Tuesday, November 18th

After a light American breakfast (croissants with cheese and bacon, followed by pancakes and maple syrup, washed down with coffee and cream) we are ready to face the day. Our executive producer, Paul, is keen to take the morning to go sight-seeing. Our first meeting is not until the afternoon and we'll have no time after that for anything but work.

First stop is Central Park. The views are fantastic and we get to see John Lennon's memorial. It's still a mecca for Beatles fans the world over and people are gathered around it lost in quiet contemplation and sorrow. On reflection, taking a photo of Paul grinning like a cheshire cat with both thumbs up is perhaps not entirely appropriate.

We walk down to the Empire State Building – the location of our afternoon meeting. We stop briefly on the way at famous toy store FAO Schwartz to play on the big piano. When we tell Nick to play on it because he looks the most like Tom Hanks, he shows his age by asking "What has this piano got to do with Tom Hanks?" Hmmm. Perhaps the Irish lady was right after all.

At the Empire State Building, we meet with our PR agency, Taylor, to work out our schedule over the next couple of days. They have managed to secure a few more opportunities for us on TV. We are to be shown on Fox News and potentially on *Good Morning America*. As these are both top-rated shows, we are very happy. It means a painfully early start for us the next day, but it will definitely be worth it.

After a lovely meal at a fantastic Italian restaurant and a couple of drinks at a 'genuine' Irish pub, we head back to the hotel for an early night. There's much to do in the morning.

Wednesday, November 19th

We are up early to go to the *Good Morning America* studios. There's just enough time to wolf down a triple choc caramel muffin before arriving for our meeting.

We walk through the studio in silence as the US equivalents of Fern Britton and Phillip Schofield entertain Il Divo on their couch. One of the producers of the show leads us into a room where we try to set up the game. A guy wheels in a TV. There's no sound, but he's not able to help us.

"You'll need an audio guy. " He says in a gruff voice. "Union rules."

We wait around for the audio guy to turn up with a speaker. Finally we get to demo *You're in the Movies* to a group of production staff and they get really excited.

"This is soooo funny." They say. "We *have* to have this on our show!"

Great news! The production staff discuss the possibility of putting us on during the 'watercooler segment', whatever that is. Paul and I high-five each other in an over-exuberant fashion. We hot-foot it from the *GMA* studios to keep our appointment with Fox News, where we are going to test the setup for their show. We meet a lovely woman called Kelly who is one of the producers of the show, who is very excited because Jane Krakowski of *Ally McBeal* and *30 Rock* fame is our celebrity spokesperson. I think she's a big fan of both shows.

After waiting some time for our equipment to be brought from the front desk to the studio – apparently moving it ourselves would have broken more union rules – we start to set up the game. Just before we can test the setup though, we get a phone call from the PR agency. The timings for *GMA* and Fox News clash, so unfortunately we are going to have to postpone the Fox news slot. We slink out of the studio with a distinctly apologetic air.

We grab a light American dinner (jumbo rack of ribs, chicken, burgers and fries from the Hard Rock Cafe) then decide to call it a night. It's been a long day and we have an even longer one lined up for tomorrow.

Thursday, November 20th

My alarm goes off at four in the morning and I stumble out of bed to prepare for *Good Morning America*. The only thing that perks me up is the thought that Paul and Nick have been up since one o'clock. They are at the Virgin Megastore helping to set up and test the area that we will be demoing the game in.

I meet up with our PR representative, ready to head to *GMA* Studios.

"There's been a change of plan" says Sarah. "*GMA* have delayed by a week as one of their other segments is overunning. We are back on with Fox News."

Previous experience has taught me that PR events are notoriously 'fluid' so I take this in my stride. We head to the studio where Jane

Krakowski awaits, and attempt to get the game set up.

It's not that easy. In the organised chaos that is live TV, everything becomes difficult. You have to talk in whispers while they are live on air, so communication is unbelievably tricky. More importantly, no-one seems to be in charge. Production staff oversee the scheduling and content, stage hands move stuff, camera guys set the camera angles and lighting guys do the lighting. None of them takes responsibility for any of the others, and they are all incredibly busy.

30 Rock's Jane Krakowski arrives at the studio and, in a break in the news, the female anchor walks over to her and gets very excited.

> ***"In the organised chaos that is live TV, everything becomes difficult..."***

They are both wearing heavy TV makeup, so much air-kissing and air-hugging ensues. I walk over to introduce myself.

"Oh my," says the news anchor. "I love your accent. You would make a perfect presenter... on the radio!"

I try my best to take the positives from this statement.

Jane seems very down to earth though, and is interviewed while she plays the game enthusiastically. Despite the fact that the lighting guy changes the previously agreed lighting, and the camera guy also decides on last minute alterations, the slot goes really well. Jane is a perfect spokesperson for the game, and the Fox TV folk are really happy.

The Main Event

I arrive at the Virgin Megastore to find everything set-up. We have taken over a large portion of the store with banners and signs everywhere. Our Burt Reynolds advert is showing on the big screens all over the shop, and we have two stations with couches, lights, and the game ready to play.

Nick and Paul are also ready to go. Nick will be manning the control room, whilst I will be demoing the game. Paul will be shuttling hard-drives between us, so that the movies can appear on the jumbotron outside.

The floodgates open and we have a steady stream of punters signing up to play. It's incredibly rewarding to see people hamming it up and enjoying the game.

As the day progresses, a lucky few get to play with Jane Krakowski. We are surrounded by a frenzied mob of TV cameras and photographers at this point. It feels a bit like feeding time at the zoo, with photographers pushing and shoving each other out of the way to get the best shot. Jane continues to smile for the cameras and act it up for the game. I try not to punch a photographer in the face, as he sticks his elbow in my ear.

People are really loving the game. We have a guy come back to play, bringing his girlfriend with him. He saw himself on the big screen outside and came back for more. All sorts of people are playing, from youngsters to adults. Somewhat randomly, TV presenter Ellie Harrison from BBC1's *Wild about your Garden* show turns up at the event, and we get her to play the game too.

Finally the day starts to wind down. We have a last round of photographs with the talent then it's time to pack up. Everyone is pretty exhausted, but as it's our last night in New York, we make plans for the evening. Our PR guys have booked us a table at a posh seafood restaurant, so we head down there for a few drinks, eat our food, then drink some more.

We get invited out to a club called the 3 of Cups. We decide that, as we are in New York we should celebrate with Statue of Liberty sambuccas. The Americans look at us like we are crazy.

Friday, November 21st

Broken. We are all broken. We meet in the foyer to check out. Big movements make me feel ill. Small movements make me feel ill. No movement at all makes me feel ill. I think I'm going to be ill.

Our flight's not until 11pm, so we have a lacklustre day of shopping and sightseeing ahead of us. Paul stumbles through a SWAT team, totally oblivious to the M16 carbines that surround him. We are all so dazed and confused, we almost get run over.

Before long, its time to bid New York farewell. We ride to JFK airport and board our plane, back to Blighty. It's been such a hectic week, I manage to fall asleep on a plane for the first time ever. I wake to see Paul staring at me with bloodshot eyes.

"You bastard," he says. "You slept through some of the worst turbulence ever! Every time I saw that you were asleep I wanted to punch you in the face."

Ha ha ha.

www.zoemode.com

University Challenged

Cambridge is often overlooked as a development hub, but its steady growth looks set to continue. **Ed Fear** caught up with some of the city's studios to find out what makes it a good place to base a game company and their views on education in the industry…

Do you think Cambridge has a strong development community?

David Braben: The great thing about Cambridge is that, partly thanks to the university, but also partly thanks to the companies like Acorn, a lot of people were here because of that whole scene around the BBC Micro. Certainly there are a lot of people who are no longer in Cambridge, but it's a very fertile place to recruit from. I think we've reached a critical mass in that there are a lot of other developers here, and now there's a pool of talent – plus we've got an awful lot of people who are not in games, but are in techy subjects that are very close – so it's a very good place for employment.

James Shepherd: It's expanded over the past 15 years. In a sense, a lot of us are children of Millenium Interactive – Mike went off and founded Ninja Theory, some stayed at Sony, and then there's Nicely Crafted, Bob and Barn – so we've all kind of grown up and as we've done so all these companies have formed. Hopefully that'll continue – the people we're employing now will spread out even further.

Henrique Olifiers: Jagex has grown from 180 to almost 400 people in the last three years, and most of them are recruited from Cambridge. But even those that don't come locally – those who come from London or Oxford – are easy to lure because of the city itself. It's very lively, it's very young. People in our industry are usually young and outgoing.

Martin Hollis: And intelligent, too. It's a cosmopolitan city – you can walk down a street and hear five languages, and people discussing their PhD subject or start-up idea. It's quite a remarkable city in that respect.

DB: There's actually quite a big start-up community in Cambridge as well, both inside and outside games, so it's a very fertile ground. There's a lot of popele coming in from London and elsewhere in the country. We're a very central location – London's just an hour away, and you can get to the North easily.

We do a lot of things with the university too, which is a very positive thing – not just careers fairs, but talking there and having a lot of people come here, whether it's for sandwich years or whatever. So I think having the university there on the doorstep is a good thing, and you hear about things like research projects early. It's all little things that aren't obvious benefits but all add up to a big positive.

HO: Jagex came out of Cambridge University – *RuneScape* was born from our founder's project there – but, aside from help with placements

"It's a cosmopolitan city – you can walk down a street and hear five languages, and people discussing their PhD subject…"

Martin Hollis, Zoonami

WHO'S WHO

James Shepherd Creative Director, Sony Cambridge

Martin Hollis Founder and CEO, Zoonami

Mike Ball Co-founder and CTO, Ninja Theory

David Braben Chairman, Frontier Developments

Henrique Olifiers Head of *MechScape*, Jagex

and so on, we don't have a massive amount of people coming from there.

JS: We do talks there, and the careers fair, but we have relationships with some other universities where we're contributing to their coursework and we're tutoring the universities, and some years we take four of five students. It's good – we've found a relationship where it benefits the students and, in a bit of a crass way, we can cream off their best staff. It sounds awful, but while research projects are great, the total direct benefit isn't as tangible as if, say, you've got a project green-lit and you suddenly need 30 artists.

Mike Ball: We've had some relationships with universities but not a particularly close one with Cambridge. We've kind of felt like Cambridge has ignored games to a certain extent, and meanwhile the games industry has gained more credibility over the years.

DB: Actually, I think that it's quite a forward-thinking university. They've been interested in the common technologies, certainly, but not in games *per se* – and that's because games have been seen in a negative light, until a few years ago, when we as an industry became more visible. I don't think that's just Cambridge, though. I've ranted a lot about the rise of the Computer Games course, where the lecturer don't have much familiarity with what they're teaching—

JS: No! No! You're opening a can of worms! You're totally right, totally right. There are quite a few game design courses where, when we meet the students, we don't think they're being taught the right stuff.

DB: There is a big positive in education – things like Dare to be Digital and Skillset are making positive moves towards capturing this enthusiasm held by students that's currently getting squashed by the universities. But there are a lot of courses where I think they're teaching whatever's at hand. They're not coherent courses; they haven't worked out which discipline they're trying to teach. They teach very, very lightweight programming in things like Java without touching on the problems, and the same with animation.

MH: The hardest one of all is game design. It's preposterous to contemplate at the moment – I don't think the industry understands it well enough to teach it. I think most people are flying on their gut.

JS: We had a lecturer come in from a university that shall remain nameless, and he asked us what we thought of his course. We said that we didn't really like it, and when he asked for our advice we told him to set his student to design a toilet, or a telephone box, or a building, because the fundamental laws of design run through everything to some degree. We find people who say, "Oh, I don't want to work on that, I only know how to design for first-person shooters" – but design is the same.

HO: It seems to be that everyone has tried the Unreal Engine at some point, like they're carpet bombing them with level design – but that's level design, not game design.

DB: That's my point about teaching what's at hand – because that's to hand, it's easier to teach, but they're not really teaching it; they're showing it. That's the sad thing; there's no plan for what they'll learn at the end of it. Speaking to people on Dare to be Digital, they say, "Wow, if only we'd done this at the beginning of our course, we'd have known what we had to learn." And that's a real indictment that the course isn't teaching them anything, other than something like Media Studies – they're studying games, which most gamers have already done at home through their hobby anyway.

> ***"We've kind of felt like Cambridge has ignored games to a certain extent..."***
>
> ***Mike Ball, Ninja Theory***

MH: And probably for longer than three years, too.

So how do you address that?

DB: Universities are incentivised in the wrong way. I've been on the advisory board for Birmingham University for a long time, but trying to get them to put maths in a course is hard. They get the same amount of money if they get a bum on a seat, regardless of the material – but some courses are harder and cost more money to teach. I've just joined the board of Skillset, which is trying to get these courses to conform to some sort of standard. Out of 80-plus, there are only four that are accredited, which is terrible. We're trying very very hard to help, but it requires a slight change in attitude. If certified courses got more from the Government, that would help hugely. The more I talk about this, the more students see that when we come to get people it really matters what they do on their course. At the moment, I would strongly recommend a course without games in its titles – Computer Science, Physics, Maths.

MH: And if you want to be a designer, play games for three years – or even better, be a games writer for three years.

JS: We had one guy who came in this year for a work placement. He was only 18, and he wanted some experience because even he was aware that his course was completely rubbish. We've got a one-day Games Eden conference soon bringing together educators and developers, and we think that's hopefully a little small step for some local change.

DB: Some courses are better than others, so I don't want to tar them all with the same brush – there are people out there really trying.

HO: I think it's a real shame that indie development is happening on its own and not

inside universities. The games that you see that are breaking new boundaries for design – they're not coming from the universities. Every other media – fashion design, or painting – those talents come out of the universities.
MH: I disagree completely. *Narbacular Drop* came out of a university in the US. Valve looked at those guys and they said, "We think we can plug this into what we have." Several years of development later they have *Portal*. When I go to shows, the most innovative games I see are by people like [*fl0w* designer] Jenova Chen.

> ***"We've tried to set up research projects with universities, and about two thirds have fallen through because of boring legal things… "***
>
> ***James Shepherd, Sony Cambridge***

There's multiple examples, but most of the interesting stuff is two or three people, they don't know what they're doing, but they make a game at university.
HO: What I mean is, look at something like St. Martin's: it's a great university for fashion design, and everyone recognises that it's the top. We don't have that for games – we don't have anything that produces that kind of challenging student.

MH: I don't think there's anything like that yet, but in the US and in Japan there are places that are starting to do that. They'll produce, say, 20 projects in a year, and three of them will be interesting. There's none of them in the UK, though, which is a real shame.
JS: I tend to agree in some ways. We try to set up research projects, or sometimes we're doing a concept where we really want to go to a university and ask if they've got any research to help a project, and we often come a bit unstuck with slightly pointless arguments about who's going to own the rights. Whereas in Bournemouth [home of the UK's famed animation school] it's pretty clear that it's theirs, we only give them a little bit of help, and then we can actually grab the student. There's got to be some discussion about that – it could be a lot better than it is. We'd love to do it more, we've tried to set up about five or six research projects with universities around the country, and about two thirds of them have fallen through because of really boring legal things.
DB: And it's a real shame that it falls on that rather than on something technical.

But how do we tempt those skilled graduates to game development, when there's so many horror stories about quality of life and much more money – up until recently, at least – to be had in the City?
MH: Well, you hear stories about young kids joining these banks, doing 80 hour weeks, a golden handcuffs deal so that you can't get out early… so there's actually quite some analogy there. *[All laugh]*
JS: We actually had a guy who left because he wasn't happy with the salary he was getting. So he joined a merchant bankers, and then a year later he came back. After three months he'd found it incredibly boring – there was no challenge, nothing interesting. So the way we get people in is by touting the innovation and the challenges: rather than building a database you can be doing a particle system, or a rendering or physics system.
DB: And at banks, it's solving the same problems again and again; there's nothing to keep you excited. It's very easy to knock other industries, but it's a very different mindset – although I don't see a huge amount of enthusiasm when people are talking about it.

Bringing it back to Cambridge – do you find it easy to tempt people away from London?
MH: Yeah. Living in London is hard – the communiting is miserable, and after two to five years people tend to get tired of it.
MB: We've hired quite a few people from London and we always find that once you get them to actually come up here and find a bit more about the city, see the quality of life you can have here – it's a really appealing place to live. It's also the top city where, as the industry gets older, they can see it's a great place to raise a family.
JS: Definitely. It's 45 minutes from London, so if you want to do the shows, museums or whatever, you can. We have transfers from other Sony studios who think, "I've reached a certain age, I want to start a family, it looks nice around here." And that's good for us, because once they settle that'll probably be there lot.

MB: One of the aims of [local developers group] Games Eden from the start was to try to promote the region as an area for games development, and the more we can do that, the more people we'll be able to attract from the London and Guildford areas.

In terms of the development community in Cambridge, is there any sort of studio interaction?
DB: Aside from seeing each other walking about, no. There probably should be.
MH: Different developers have different cultures, and a lot focus just on making their games. But we do have Games Eden to make developers connect and share information, because that can make the difference between a successful business and an unsuccessful one. We try to promote developers talking to the community, talking to educators and to be more extroverted. It's been going for over a year now, funded by the local Government agencies, and there's regular events.
JS: Well, when Sony worked with Ninja Theory we worked hand-in-hand for a period, and now they're off doing their own thing.
MH: I think cross-developer partnerships are going to be happening more and more. If there's the geographical proximity it's so much easier than teleconferencing every day.
DB: There's also the unofficial community – a lot of people meet up in pubs. A lot of people know each other socially. I think it's very healthy, to let people know what's going on. I'm sure there's a lot of gossip going on.

What more do you think could be done to help foster a community in Cambridge?
JS: The truth is, we've all got our projects, we've all got our deadlines and we're focused on that. What I'd quite like to be able to say is 'I need three designers for three months, but I've also got two programmers with experience in XYZ that I don't need right now.' To be able to do that, rather than hire an insourcer or temp, that would be potentially great.

GAME IN SCOTLAND 2009

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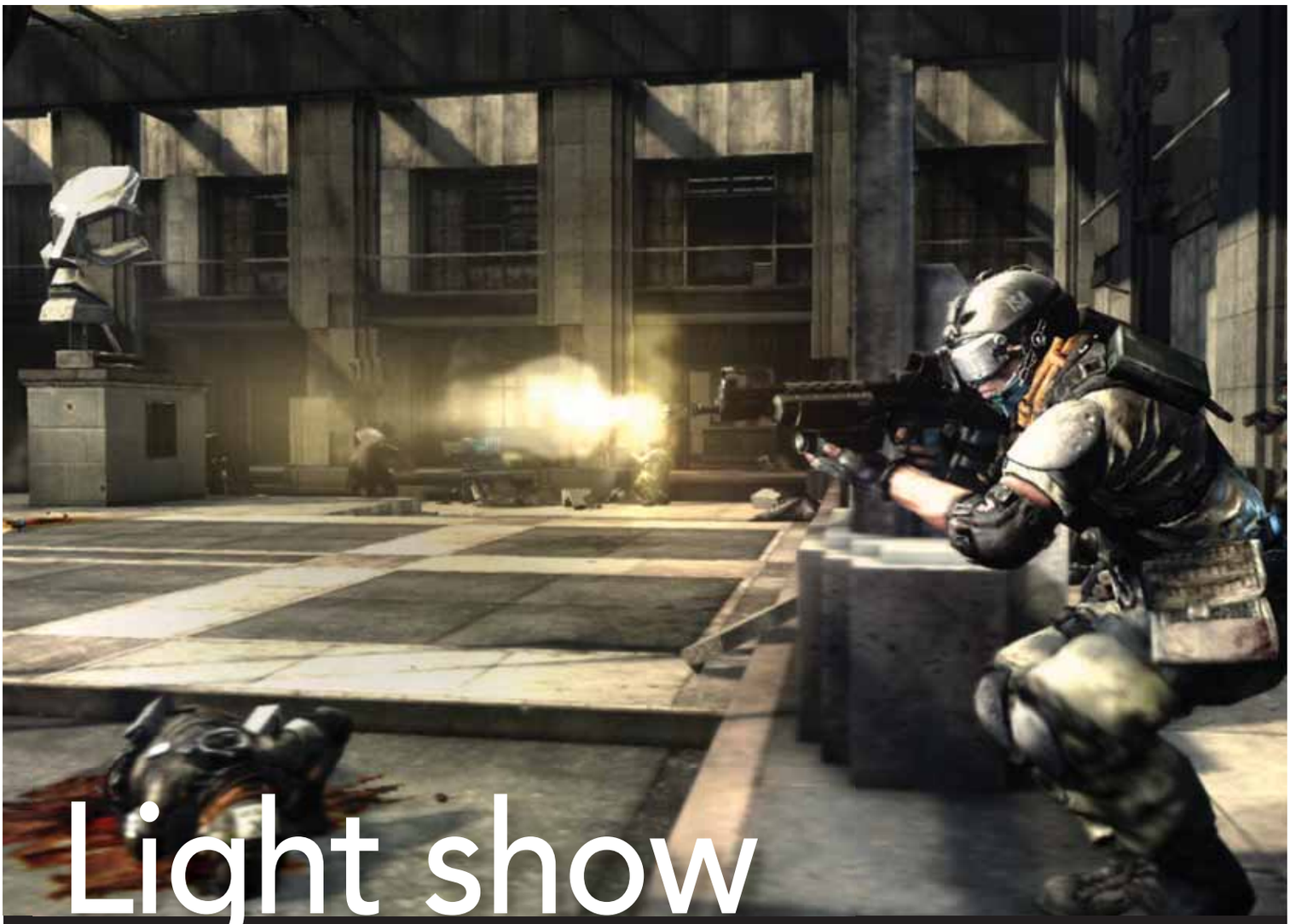

Light show

Is deferred rendering the next big thing? p50

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Survival of the species

THE QUESTION OF competition or collaboration is one that pops up in many varied locations. A stock discussion point for economists, it's the sort of thing that also arises in maths game theory, as well as biology. Indeed, those wacky evolutionary psychologists have managed to work out that one is a subset of the other, at least when it comes to genetic altruism. It's enough to get your Venn diagrams in a twist.

In the RGB, tooth and claw world of game tools and middleware, the question has been less thoroughly explored. If the sector was examined as an island-based ecosystem though, we might be surprised at the lack of wild warthogs, grubbing around in the dirt with their tusks to find roots or even the odd prehistoric truffle.

Not specifically warthogs of course, but the sort of medium-sized animal that sits between the vole and the woolly mammoth. Perhaps this isn't a massive shock, as within the wider development market, game studios of between 75 to 150 staff are also in short supply, having either gone bust or been bought up. But taking into the account the difference in scale (the equivalent might be 25 to 60 staff), what is strange is just how few such companies there have been over the past couple of years.

Sure, there are plenty of giants lumbering around, but even if you assume that smarter companies need fewer staff to be profitable, frankly there are still too many niche operators offering clients the future even though they probably won't be around tomorrow.

One of the main reasons seems to be the trend for partner programmes which sees the larger companies providing sales and support for the small fry. Obviously it makes sense for all concerned in the short term, but maybe more CEOs should be considering at what point collaboration with a big beast becomes a genetic dead end.

Jon Jordan
jon.jordan@intentmedia.co.uk

< CODING >

BACK TO FRONT

No longer just a programming niche, deferred rendering is becoming an increasingly popular technique on consoles too…

AS AN OPTION IN the armoury of the programmer, deferred rendering has been around for a while. Released in 2007, PC shooter *S.T.A.L.K.E.R.* was one of the first commercial titles to make use of the technique. Developer GSC Game World explained it was the ideal choice in the case of that particular game because of its lower geometry and pixel-processing requirements, and lower CPU overhead, compared to a traditional forward shading engine.

Something else tha further encouraged its adoption has been the work carried out by Sony's internal R&D team to standardise deferred rendering as something that can be used on PlayStation 3.

As well as being widely distributed within Sony studios, the results of this labour have also found their way into some high profile multi-format games. Collaboration with Rockstar resulted in its use in the RAGE technology that powers *GTA IV*, for example. Media Molecule's *LittleBigPlanet* and Guerilla's *Killzone 2* are two Sony-backed games that make the most out of the additional control and sophistication it enables in terms of game lighting.

"Because you project your lights into the scene as a post-process, you're not lighting any pixels that are hidden behind any other pixels," says Jan-Bart van Beek, art and animation director at Guerilla, describing one of the advantages that convinced the studio make the early decision to use deferred rendering in *Killzone 2*.

He points out there some subtle advantages in terms art process too. "Because you take all the lighting calculations out of your shaders, it makes them a lot less complicated. This means your artists can create the shaders, not programmers. We used Maya's shading editor to make our game shaders. And because the cost of these shaders is low, you can create specific looks for specific objects instead of having to use general templates."

Of course, the headline advantage of deferred rendering remains the number of lights you can use. "Effectively you can have an infinite number of lights as opposed to about four in a normal shader, because the cost is related to the number of pixels you're lighting, not the number of lights," van Beek says. For example, the heaviest scenes in *Killzone 2* involves several hundred lights.

There's no such thing as a free lunch, however, and the inherent disadvantages of deferred rendering mean it won't replaced standard forward rendering anytime soon.

"The biggest visual issue with deferred rendering is the lack of a really good, universal approach for integrating translucencies," says Dag Frommhold of German middleware provider Trinigy. The company is currently working on a deferred element for its Vision engine, which will provide clients with a hybrid solution that seems to be the only way to solve the problem.

Guerilla's van Beek says a similar approach was used in *Killzone 2*, with a forward renderer introduced to handle transparency effects such as water. Similarly, it uses an offscreen renderer to deal with particle effects, which are then composited back.

Tim Sweeney, architect of the Unreal engine, highlights further visual challenges of using deferred rendering. "It's faster for large numbers of lights and shadows, but the drawbacks are increased video memory usage, and artistic limitations as you force all objects to be rendered with the same material model," he says "Unreal Engine 3 has an extremely flexible and artist-extensible material system, so we didn't want to constrain this unnecessarily."

Another issue is anti-aliasing. "Anti-aliasing is a key to the rendering quality of *Gears of War*," Sweeney explains. "If you look closely, you'll see that all static and dynamic lighting is anti-aliased with multisample anti-aliasing, so moving to a pure deferred rendering approach would be a step backward."

Significantly though, UE3 does use some deferred elements, re-using z- and colour-buffers and techniques that would be otherwise impractical, such as velocity-buffered motion blur. And Sweeney is happy to concede that future hardware architectures might encourage the further use of deferred rendering. "I expect we'll see developers inventing ever-cooler deferred techniques," he says. "But the constraints assure that it won't become the predominant rendering scheme, at least within this console generation."

Deferred Rendering

Despite being very different in visual tone, both Killzone 2 and LittleBigPlanet used deferred rendering

< AUDIO >

SMALL IS BEAUTIFUL

Donya Labs' 3D optimisation technology Simplygon is increasing art efficiency as it decreases game assets…

Simplygon 2

Price: Available on request
Company: Donya Labs
Contact: +46 733 14 94 00

IT'S A MARK BOTH of how specialised game development has become, and the complexity of games themselves, that Swedish technology vendor Donya Labs exists. A provider of 3D optimisation technologies, it follows a similar vein of Scandinavian innovation as Finish outfit Hybrid Graphics, now Umbra Software. Its dPVS software is used to optimise 3D environments by automatically culling overdraw; something that has proved highly attractive for MMOs.

Donya's Simplygon technology provides all developers with a similar performance boost, working on a more atomic scale by automatically enabling you to optimise 3D models in terms of mesh complexity.

"Developers need to reduce the number of polygons in a scene, preferably without losing visual quality. Simplygon is a mesh-decimation or polygon-reduction tool, meaning that when you integrate it in your content pipeline, it sits in the background optimising all the content you build," explains CEO Martin Ekdal.

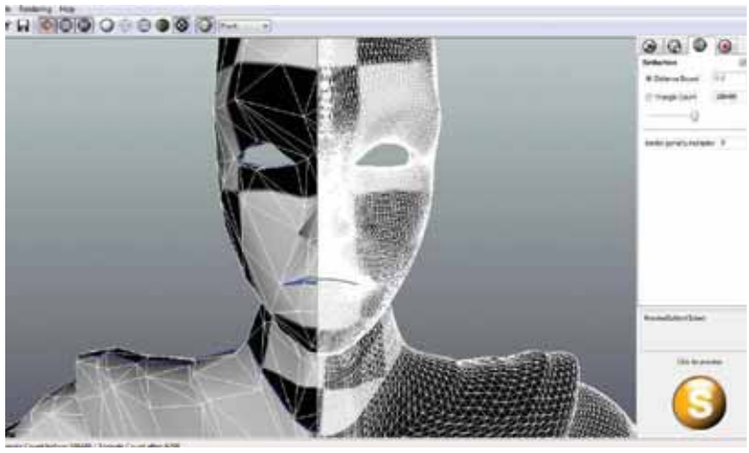
The technology is already in use with companies such as Crytek, Evolution Studios, EA and CCP.

Simplygon does require integration within your art pipeline however.

"Our approach to 3D optimisation isn't dependent on what DCC tools you use," Ekdal says. "We find that by integrating Simplygon elsewhere in the pipeline, you can achieve greater efficiency. Our customers have chosen to integrate Simplygon in different ways depending on their content pipeline's configuration."

That process may be eased in the medium term however, with Simplygon likely to find its way into the various partner programs of the larger middleware engine companies such as Epic and Emergent, although nothing has been formally announced.

There are plenty of other aspects of development that the technology could be used for, too, says Ekdal:



"Instead of creating new content to cover the stepdown from Wii to DS, PS3 to PS2 to PSP, or generally to iPhone, Simplygon could do it automatically. It would also be useful in terms of optimising downloadable content for MMOs and like, before or during the download process."

Even further into the future is Donya's Xtreme Polygon Reduction & Repair System. XPRSS (a working title) is an experimental technology that produces simplified meshes. As well as the mesh, a new texture is created, with the result being something that's extremely low-poly and optimised for a particular screen resolution. "We're really looking forward to introducing these re-meshing and re-texturing abilities sometime during 2009," Ekdal says.

Better watch this 3D space, as it gets smaller and smaller.

< AUDIO >

WE BUILT THIS CITY

Thanks to its history with urban racers, PixelActive's package is positioned to exploit the building boom…

CityScape v1.6

Price: Available on request
Company: PixelActive
Contact: sales@pixelactive3d.com
www.pixelactive3d.com

AS THE TERM free-roaming has become ubiquitous on game marketing sheets and a consequential headache for designers, so specific city building tools have started to emerge from middleware companies. Californian outfit PixelActive can point to years of game development as the bedrock for its solution, CityScape.

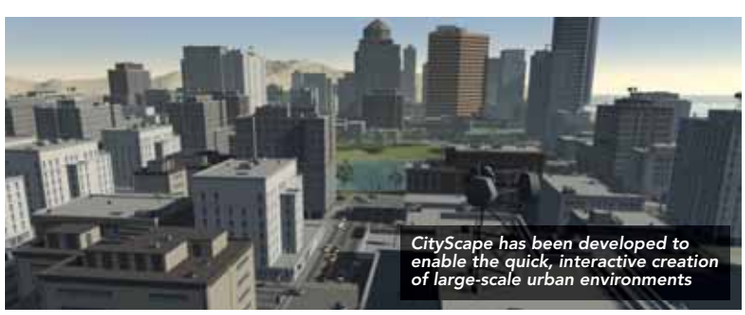
PixelActive was formed after Steve Rotenberg left Angel Studios, the company he had co-owned previous to its sale to Take-Two. His subsequent interest in the sector wasn't perhaps surprising, given Angel's reputation as one of the first studios to popularise the genre thanks to series such as *Midtown Madness* and *Midnight Club*.

"Having experienced the production process, the amount of effort it takes and the difficulties that arise managing that much data within traditional modelling tools, I wanted to make an interactive tool for making cities," he explains. Development started in 2003, with Rotenberg taking the next couple of years to refine the technology.

"We started licensing in 2007, which gave us a chance to test it within a production environment and work out all the kinks," he says. Clients include THQ-owned Volition, which develops the *Saints Row* franchise. Outside the games industry CityScape is used by industrial design and geo-mapping companies. "We were quiet about it, but as of six months ago we've become more open as it's now available as an off-the-shelf product."

Rotenberg says the key to the software is its ease of use. "We focused on building a fully-interactive, designer-driven tool that gives full control in a drag-and-drop manner. It's not something that will build a city for you but it is something you can quickly use to build a city that is exactly how you want it to be."

An important part of fitting into the production process is the interactive prototyping CityScape engenders. The process typically starts with laying down terrain details and then building up road systems. Placeholder buildings and props can then be exported from major DCC packages such as Maya through the Collada file asset exchange system. Exporting into your game engine uses the same system to create real-time ready assets. Level of detail and geometry optimisations are also available.



CityScape has been developed to enable the quick, interactive creation of large-scale urban environments

Particular enhancements for the 1.6 release include a collaborative client-server solution so multiple users can work on the same environment, and support for solar and lunar objects based on real world locations and times.

Further work is being carried out to improve the authoring process for clients such as serious games and military contractors. Enhancements to the road system are on the cards also.

But specifics aside, it's improving CityScape's ease of use that Rotenberg says takes the most effort. "The cool underlying technology that generates roads tends to be easy compared to making such things truly useable," he explains. "We put a lot of effort into the UI and general interactivity. Seemingly small things like the undo took a huge amount of time to make it work, but that's vital for people who want to build cities quickly."

PROTOTYPINGROUNDUP

Out of the mind's eye

Vision is the easy thing – shaping it into a form that's worth investing your time and money is the difficult thing, reckons **Jon Jordan**. Time to brush up on prototyping and pre-viz tools…

With 'risk' an increasingly dangerous word when it comes to game development, anything that can reduce its hold over creativity should be thoroughly investigated. Of course, the process of prototyping games has been around as long as the industry, but it's becoming much more sophisticated as different aspects of a game – from the basic logic and mechanics to character, location and colour palette – need to be quickly combined and iterated.

The question of whether such activity should be carried out within game engines remains unanswered, however. For all the bells and whistles they provide, there is a strong feeling that a more iterative and pared down environment will bring core ideas to the surface more quickly. This is particularly the case for smaller studios who are less restricted by console features and those hothousing in a collaborative manner with participants in various geographical locations.

Yet, while there is a vast range of helpful products available, what seems much harder is for the developers of these tools to build a sustainable business. Most recently, UK outfit Antics Technologies shut up shop in November 2008 after failing to make its Antics 3D real-time pre-viz package profitable.

GAMEBLENDER

TECHNOLOGY
GameBlender v2.42

PLATFORMS
Various, including Windows, Mac OS X, Linux and Solaris

INTEGRATION WITH OTHER TECHNOLOGIES
Bullet physics, Python scripting language

COST
Free

CONTACT
www.blender.org

GameBlender brings interactivity to the open source Blender package

www.blender.org

An extension to the open source 3D graphics package Blender, GameBlender has been specifically developed as a fast prototyping tool. It uses a graphical 'logic brick' approach, which defines gameplay elements such as sensors, controllers and actuators, enabling you to build up overall behaviour. You can also use it to create standalone products or embedded web apps should you wish to take it further. Handily, it comes bundled with the standard Blender release.

DARKBASIC

TECHNOLOGY
DarkBASIC v1.21/Pro v7.1/GDK v7.1

PLATFORMS
Windows

INTEGRATION WITH OTHER TECHNOLOGIES
PhysX, Dark AI, Dark Shader

COST
£20.99/£44.99/Free

CONTACT
newbusiness@thegamecreators.com

DarkBASIC lets you build DirectX game using BASIC commands

darkbasic.thegamecreators.com

Developed by The Game Creators, the various forms of DarkBASIC – which range from the entry level version to the more fully-featured Pro version, with low level access via C++ available using the Dark GDK – are designed to enable users to create complex interactivity using the BASIC programming language. All versions take DirectX as a foundation; DX7 for DarkBASIC and DX9.0c for Pro. The GDK is available as a free download together with Visual Studio Express.

VIRTOOLS

TECHNOLOGY
Virtools v4.1

PLATFORMS
Windows

INTEGRATION WITH OTHER TECHNOLOGIES
3ds Max, Maya, XSI, Collada, PhysX

COST
Available on request

CONTACT
+33 1 61 62 61 62

Virtools is one of the best known game prototyping tools

www.virtools.com

Built around a flexible approach that separates data and behaviours within a visual drag and drop authoring environment, Virtools has become popular in the industrial design sector thanks to the company's buy-out by Dassault Systèmes. It is still used by game companies however, both for prototyping and occasionally for full production. It comes with its own scripting language (VSL), and there is the option of an SDK for those so inclined.

MOVIESTORM

TECHNOLOGY
Moviestorm
PLATFORMS
Windows/Mac OS X
INTEGRATION WITH OTHER TECHNOLOGIES
TBA
COST
Free
CONTACT
+44 1223 462 394

Moviestorm is one of the first dedicated machinima creation tools

www.moviestorm.co.uk

Technically a machinima creation tool rather than a specific game-related technology, Moviestorm's ease of use – not to mention its ability to quickly prototype and iterate cutscenes, dialogue and character sketches – makes it a useful tool for developing plot, as well as creating marketing material and the like. Props and characters can be bought from the website, and future versions will enable the import of custom props and objects via the Modder's Workshop tool, which is now in beta.

SKETCHUP

TECHNOLOGY
SketchUp, SketchUp Pro
PLATFORMS
Windows, Mac OS X
INTEGRATION WITH OTHER TECHNOLOGIES
Collada
COST
Free/£341
CONTACT
sketchup.google.com

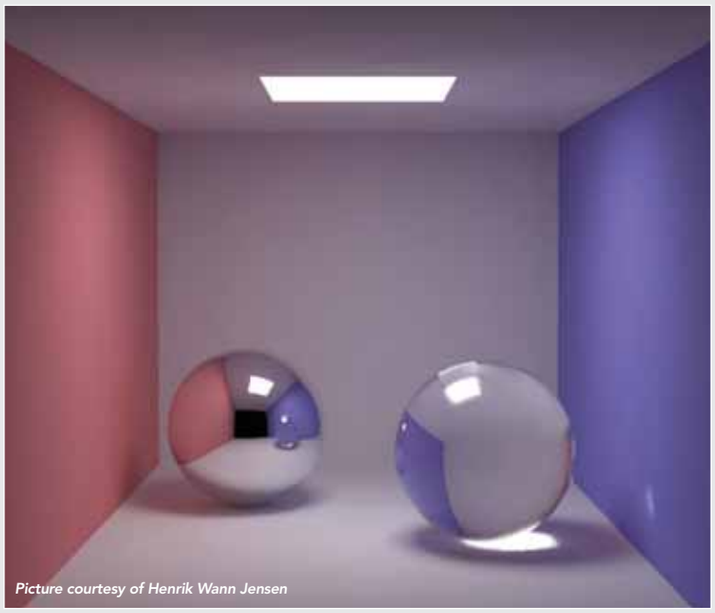
Google's SketchUp is one prototyping tool well worth investigating

Perhaps the simplest 3D art tool in the world, thanks to its focus on allowing users to effectively work in 2D, Google's SketchUp is ideal for working on basic blocking designs and spatial development of levels. The package's growing usefulness also links into its position within the ever-expanding Google portfolio, with links to Google Earth, Maps and 3D Warehouse. The Ruby scripting language also extends SketchUp's functionality with various tools available.

Irradiance Volumes

by David Jefferies

Black Rock Studio



Picture courtesy of Henrik Wann Jensen

IN THE PAST we've lit our environments using a radiosity bake on the vertices plus per-pixel ambient occlusion for the important bits of scenery. We've then relied on a simple local lighting model (sun + kicker + faked hemisphere lighting) for the dynamic objects. For large outdoor environments lit by the sun (as you'd find in most racing games) this is cheap and very effective.

The drawback is that the immediate environment doesn't affect the lighting – so if an object is next to a large diffuse green wall, then there's no transference of light from wall to object. We're missing bounce light.

We're trying to improve our engine so it's better suited to urban landscapes and, in particular, we want to remove the restriction that our environments need to be static. We can't afford to ignore that bounce light anymore, so we've been on the look out for real time global illumination models that can handle complex, changing environments.

Recently, one of our lighting engineers has been looking at irradiance volumes. Originating from a 1998 paper titled 'The Irradiance Volume' by Gene Greger and others, these are a method for storing irradiance at probes in 3D space and interpolating between the probes to evaluate the lighting at any point in the environment. The technique has been used extensively in films.

Irradiance is a measure of light incident on a point. By knowing the irradiance of any point in 3D space we're able to correctly light our dynamic objects as they move through an environment. It's used as a replacement for the ambient term in a simple lighting model because an ambient term is simply an approximation of irradiance due to indirect lighting.

At export time we render a cube map of the environment from the point of view of each probe. These cube maps are then projected into spherical harmonics that can be stored as just nine coefficients. One of the nice things about the spherical harmonics is that they can be linearly interpolated to give the lighting at any point in 3D space.

We still have to overcome some technical issues such as how to maintain the resolution of probes we require (ideally we'd like better than one probe a meter) over the large real-estate of one of our environments, and how can we efficiently update those probes when the environment changes.

Fortunately, Peter-Pike Sloan works in one of our R&D labs in the US and he's been giving us many good pointers on what we need to be doing, but its clear there's still a lot of work to be done. If we can overcome these technical hurdles then the game we're currently working on is ideally suited to benefit from real-time global illumination.

www.blackrockstudio.com

KEYRELEASE

PRODUCT: morpheme 2.0
COMPANY: NaturalMotion
PRICE: Available on request
CONTACT: +44 1865 250 575
www.naturalmotion.com

The physical difference

The latest version of NaturalMotion's animation production pipeline morpheme sees the integration of character animation with character physics, **Jon Jordan** discovers…

One of the highlights of NaturalMotion's 2008 was the release of the euphoria-powered GTA IV

2008 proved to be great year for NaturalMotion. Its much anticipated procedural animation technology euphoria shipped in *GTA IV*, one of the year's top titles. Still, CEO Torsten Reil is confident 2009 will be even better.

As ever, there's lots going on behind the scenes – all of which will be revealed in due course, he explains. More generally though, he's very enthusiastic about the state of the middleware market, which he predicts will overtake the games tool market in terms of revenue. "There are decades of growth ahead," he says.

The same optimism can be seen when he talks about the state of game animation. "When it comes to other areas of middleware, the problems have started to be solved, but in animation we are far from diminishing returns. It's the most complicated sector, and the one where you can provide the most visual bang for the buck. There will be years of innovation," he claims.

NaturalMotion is currently in the process of rolling out the second version of morpheme, which consists of an animation engine and the visual editor also used by its other products euphoria and endorphin.

Morpheme 2.0 marks a significant step forward from basic animation, according to head of technology Simon Mack: "At the moment, the games industry seems to be having trouble finding the best way of integrating physics with character animation. What happens is people build out their entire animation system and then it gets shoved through the physics system, which is the reason you still see lots of bad ragdolls."

Built on top of Nvidia's PhysX engine, morpheme 2.0 provides an integrated authoring environment and runtime. PhysX can be bundled into the pricing too. "We've been working closely with Nvidia and got a lot of support from it," Mack says.

> ***"We're looking for a more compelling way of mixing animation and physics…"***
>
> ***Simon Mack, NaturalMotion***

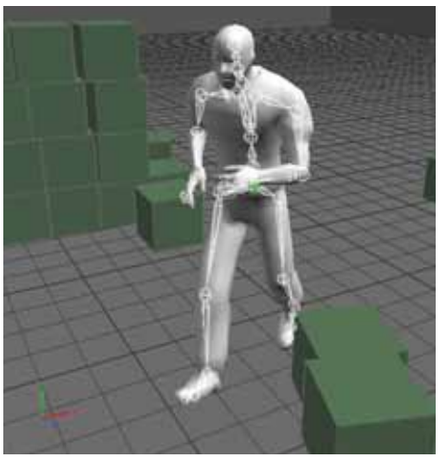
"We've extended our animation browser view within the editor so you can now view the full skeleton and export the hierarchy. In addition, we expose all the attributes of the physics system enabling you to modify joint limits, material properties, and the friction within the visual editor. The whole point is to properly integrate the character physics and character animation together."

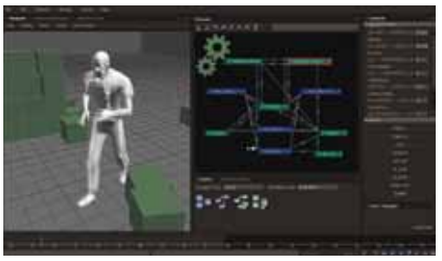
Morpheme 2.0 doesn't require PhysX however – other physics engines can be used as long as developers are happy to do the integrations. What is vital about the release is the way it enables animators to iterate within the editor. Thanks to its support for scripting, you can use console joypads to control your characters, dropping in geometry to tweak transitions between the different states.

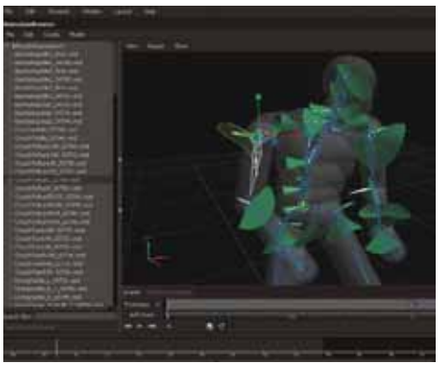
"What we're looking for is a much more compelling way of mixing animation and physics, so you can define how parts of your character are deformed when they come into contact with a wall, for example," Mack demonstrates.

"Here you can see that the upper body is deformed, but the lower body isn't because there are different techniques running on the upper and lower body. This gets to the heart of what we're doing. There are different ways of mixing animation and physics but rather than do it in code, we let the animator define how the physics works and it's completely integrated as part of the overall motion tree."

A step in the right direction for animators, then. And, if Reil is to be believed, morpheme 2.0 also promises to be the start of NaturalMotion's great leap forward.







Top/Middle: Morpheme 2.0 improves on its clean visual editor approach with the addition of a physics engine.

Bottom: It also enables animators to tweak all the physics-driven attributes of their skeletons such as joint limits.

All about timing

The reason animation and physics don't mix is more than the lack of communications between coders and artists, says Simon Mack. "It's a philosophical problem," he muses; the issue is that physics can only be updated once per time step, while animation is less constrained.

"A blend of tree of animation might have two branches of physics feeding into each other, but you can only update the physics once per frame. You can evaluate the animations whenever you want but if you have that restriction, it's difficult to work with. That's one of the reasons people tend to split out animation and physics."

In morpheme 2.0, NaturalMotion has worked hard to ensure it gets around the issue by cleverly limiting the choices made available. "The user is only presented with nodes they can drop into appropriate states. Behind the scenes morpheme subtly enforces the rules in terms of which nodes can be connected together. It's a surprisingly complex problem to solve."

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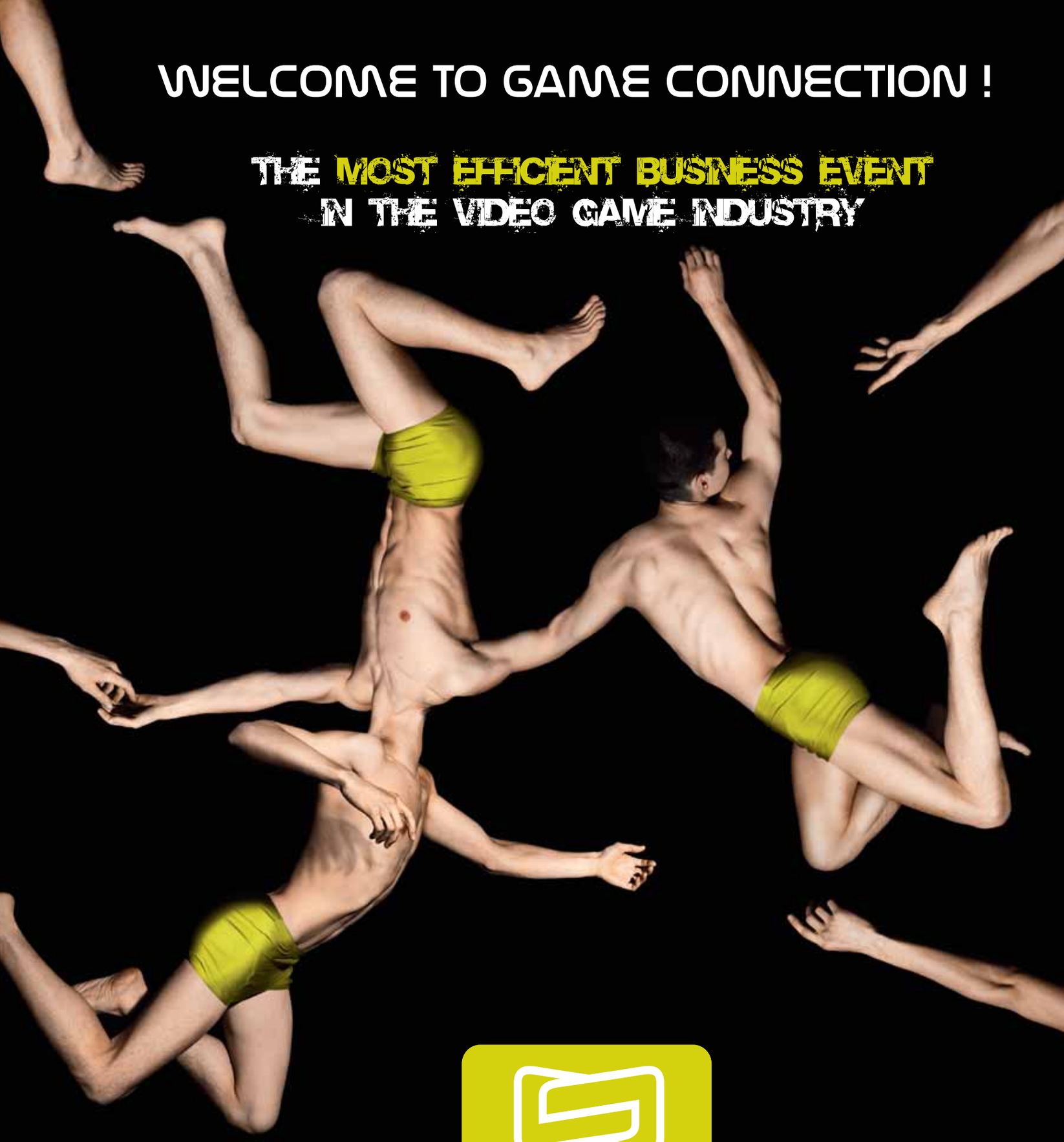

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HEARDABOUT

Far Cry 2

How does a team in Montreal recreate the blistering sounds of a war-torn African nation on the brink of collapse? **John Broomhall** finds out…

From left to right: Olivier Girard, Justin Phillips, Patrick Paradis, Jeff Wesevich, Dave Blake and Michel Marsan

FORMATS: Xbox 360, PS3, PC

DEVELOPER/PUBLISHER:
Ubisoft Montreal

AUDIO TEAM:
Audio director: Jeff Wesevich
Sound design: Michel Marsan, Olivier Girard, Justin Phillips, Dave Blake, Amaury LaBurthe
Audio programming: Raynald Bouchard, J. F. Levesque
Original music: Marc Canham
Dialogue direction: Patrick Redding

THE NUMBERS:
Sound FX – 10,000 files
Music – 128 minutes
Dialogue – 12,000 lines

True or false – Ubisoft have a full-time Foley artist on staff? The rather wonderful (and slightly mind-blowing) answer is that it's true. But more of that later. First, we asked Michel Marsan and Jeff Wesevich about *Far Cry 2*'s bold creative step of choosing a quartet-based music score.

"We decided to take a very different musical direction from other shooters," said Marsan. "We weren't afraid to take a risk, though it was vital to have ample opportunity for experimentation. Demos were a useful proving ground for ideas with *Requiem For a Dream*'s soundtrack emerging as the main music reference. We wanted to express the darkness and madness of the struggle between *Far Cry 2*'s two fighting factions."

The avant garde approach sometimes felt at right angles to the lush African backdrop, said Wesevich: "We developed the implementation whilst Marc and Richard at Nimrod Productions faithfully remixed and reworked the music itself and, gradually, it all gelled. We ended up with something lighter, sitting in the action mix a lot easier and giving us freedom to use music in places we hadn't anticipated. There's room for speech and FX with the quartet flowing in with the action and ambiences – it's emotional and ethereal, but has a distinct identity. It's also interactive with a variety of game state triggers reflecting various combat and suspense levels as well as case-specific music, such as for walking in the woods or chases."

> ***"We probably did more Foley than for any movie…"***
> ***Michel Marsan, Ubisoft***

Interactivity was also vital for the 12,000 lines of authentic dialogue recorded with South African actors in-country. One programmer spent the entire project dedicated to creating credible AI conversation in response to game events, whether overheard as the player stalks the field or in the thick of battle.

Critical to the game design was conjuring the ambient sound of the African desert and jungle.

"We needed you to really feel you're there," continued Wesevich.

"It's a 24 hour experience – time will pass and what you hear in the middle of the morning as opposed to the dead of night will vary greatly. Where you are, what type of terrain you're in, how dense it is, and what kind of terrain you're next to are all important factors which our complex system takes into account, literally programming the sound replay by the hour.

"There are two ambient sound 'clouds' around the player – one for far sounds and one for near. 3D sounds attenuated for distance are positioned randomly with lots of variation – the same effect appearing twice may sound distinctly different depending on where in 3D space it pops up. For the far 'cloud' we have alternative volume curve set-ups with delay and reverb processing added. Then we can mix 'cloud' sets – for instance, evening sun starting to go down and transitioning jungle to savannah, so you'll maybe have some 'jungle distant' mixing with 'savannah close'. In 5.1 it pulls you off the screen and produces an almost physical feeling of being there – if you fire a weapon, the birds and insects stop immediately. Add the music kicking in and you start to get a real nice feel for a lot of the action."

So, back to the subject of Foley. "For *Far Cry 2* alone we probably did more Foley than for any movie," said Marsan. "The weapon manipulations require a lot, and then there's masses of idle animations – cutting in from CD libraries isn't good enough, it has to be done precisely to fit. We put lots of small audio elements together on-the-fly to create a composite detailed picture. Landing from a jump will sound different depending what equipment you're carrying, so if you have Molotov cocktails hanging off you, you'll hear the liquid swishing in the bottles when you land heavily. And yes, it's true we have a full-time guy called Tchae Maesroch working out of Montreal doing Foley for many of our games – it's really great!"

Do *FC2*'s audio gurus consider this a sign of how far game audio has come – and will it go beyond movie sound? Marsan is confident that it already does: "We're dynamic, we're interactive – we're ahead of movies in that respect. We have to think through all the audio situations and consequences of the player's actions."

"What we've been able to do with current-gen is incredible – especially with run-time processing," agrees Wesevich. "But it's still much easier to mix in a movie: you have such freedom to change the sound treatment – freeze the audio, do crazy special effects, go to unreality and back – all to tell the story and grab the attention. In games we're still working that out. I'm really excited to see how things pan out over the next two to three years, and I hope my next project will have this approach as a centrepiece."

John Broomhall is an independent audio director, consultant and content provider
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www.johnbroomhall.co.uk

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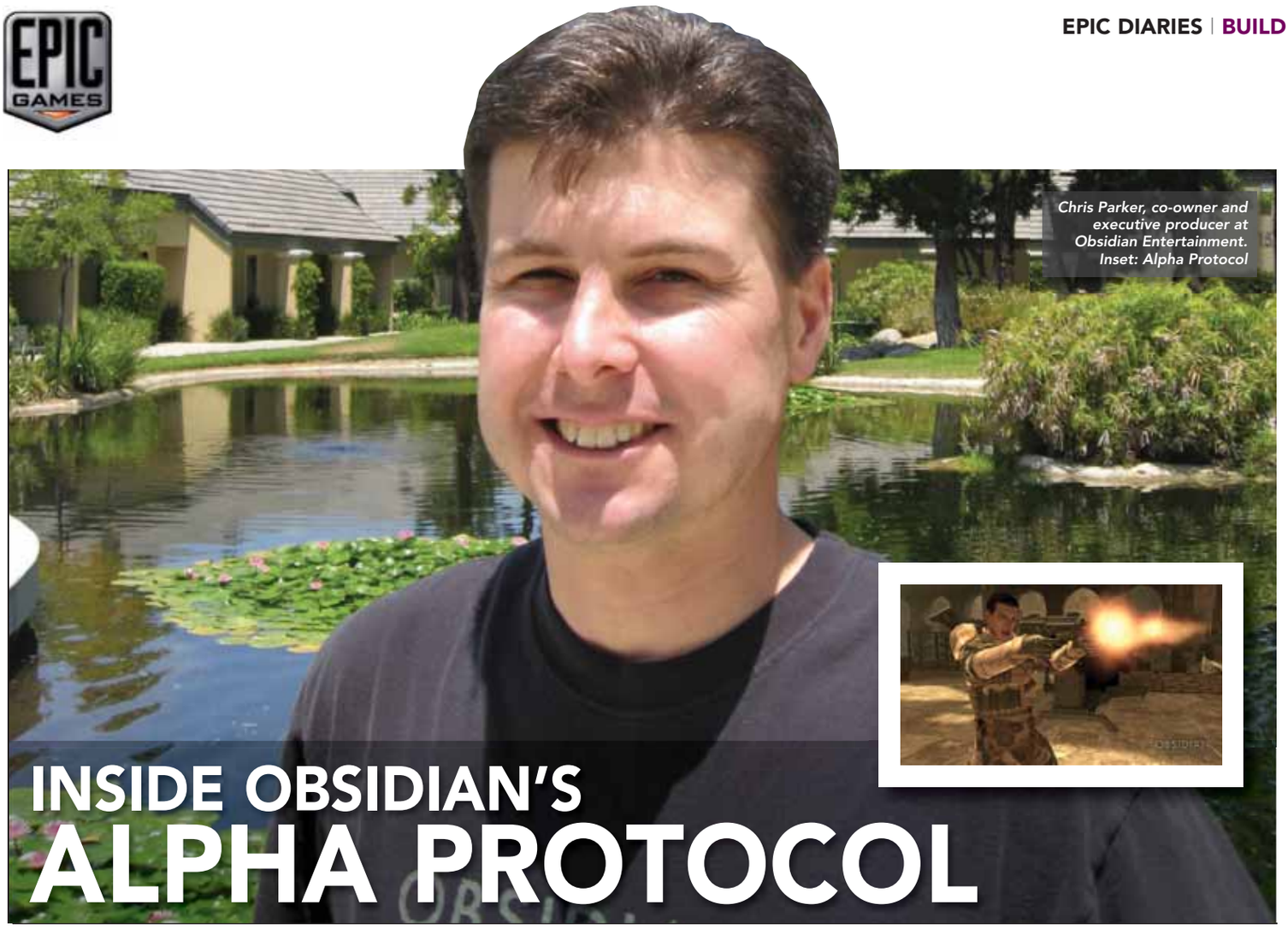

Chris Parker, co-owner and executive producer at Obsidian Entertainment. Inset: Alpha Protocol

INSIDE OBSIDIAN'S ALPHA PROTOCOL

The following excerpt for www.unrealtechnology.com was written by freelance reporter John Gaudiosi.

Obsidian Entertainment's *Alpha Protocol* is a massive, espionage-focused RPG set to be published by Sega for PC, Xbox 360 and PlayStation 3 early this year. Chris Parker, executive producer and co-owner of Obsidian, recently elaborated on why his team is using Unreal Engine 3 to develop the game.

"There are a number of benefits to using UE3," said Parker. "Much of the heavy lifting has already been taken care of with regards to running on all platforms. The material shader system is powerful and enables you to make great looking stuff. We use all of the engine's editors, from interface to cutscene timeline tools, as well as its scripting system for our gameplay needs."

One of Parker's goals was to create an action-packed RPG, so Unreal Engine 3 was a great fit for the team from the start. Parker said the aim was to make an RPG that was lighter and used shooting mechanics.

"*Alpha Protocol* is a dream project we've wanted to do for a while. We wanted to take everything Obsidian and Black Isle has accumulated with story and role-playing systems and apply it to a modern-day RPG," said Parker.

Another key ingredient that Unreal Engine 3 offers is cross-platform development ease. UE3 gave the team a layer between the different console hardware and the assets they wanted to develop.

"It isn't as simple as making models and out pops a game, but we've been able to get versions up and running on PS3, Xbox 360, and PC with very little trouble," said Parker. "We have to pay close attention to how the engine works to ensure that we properly utilise it for each platform, but as long as we're careful UE3 allows us to develop for all three platforms in a consistent manner."

Since *Alpha Protocol* has been crafted for both PC and console gamers, the gameplay has a blend of classic RPG elements with new modern-day spies, gadgets, weapons and action.

"While seemingly straightforward, it doesn't take long before the game starts taking sharp detours," added Chris Avellone, creative director of the game and co-owner of Obsidian Entertainment.

"In *Alpha Protocol*, the storyline isn't linear – we've given a lot more freedom in how you choose to save (or not save) that world, and tried to provide the player with options on how he chooses to uncover the plotline and the relationships between the key characters in the game."

Alpha Protocol incorporates elements fans of fictional espionage characters like Jack Bauer, Jason Bourne and James Bond are used to today. Avellone promised that there will be plenty of romance, colorful villains, action, bullets, betrayals, and alliances.

Unlike television and film spies, it's the player that's in the center of all this intrigue, and the story progresses based on the decisions the player makes throughout the game.

"Many of our previous titles have relied on a hub structure, but *Alpha Protocol* takes the system a step further by presenting the player with a challenge and then offering many choices and missions for how to approach the problem," said Avellone.

"Options include using espionage, surveillance, running-and-gunning, talking to contacts, or computer infiltration. We also allow the player to pick and choose which missions to tackle in order to experience the story in a way that complements character-building choices."

Obsidian's new take on espionage and the RPG genre is sure to offer gamers something never experienced before on PC or consoles.

UPCOMING EPIC ATTENDED EVENTS:

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Las Vegas, NV
February 18th - 20th, 2009

Game Developers Conference
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March 23rd - 27th, 2009

Please email: mrein@epicgames.com for appointments.

To discuss anything raised in this column or general licensing opportunities for Epic Games' *Unreal* engine, contact: **mrein@epicgames.com**

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***Mark Rein** is vice president of Epic Games based in Raleigh, North Carolina. Since 1992 Mark has worked on Epic's licensing and publishing deals, business development, public relations, academic relations, marketing and business operations.*

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develop evolve

Video games are evolving. The way video games are developed is evolving.
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evolve will focus on how to develop games for new platforms including mobile, iPhone and XBLA, new technologies such as Facebook and YouTube and new markets like social and casual gaming. It will help game developers tackle the issues arising from emerging platforms and digital marketplaces, connected gaming, user-generated content and cross-over between games and Internet services.

evolve takes place on Tuesday 14 July and consists of three dedicated tracks - Coding & Production, Art & Design and Business. On top of that there will be a new evolve track added to the Develop Conference on 15-16 July which will sit alongside the existing tracks - Coding, Production, Game Design, Art & Animation, Business and Audio tracks.

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Studio News

This month: nDreams, Denki and Relentless

nDreams has welcomed Chris Nuttall to the company as its new business development director.

The appointment marks the beginning of a new nine-month recruitment drive by the studio, which hopes to boost the developer's headcount by 30, filling several positions including roles for a producer, a lead programmer, a finance manager, and several game designers and artists.

nDreams CEO Patrick O'Luanaigh said: "We're delighted to have Chris join the board, and I personally look forward to working more closely with him to take nDreams to the next level. There is a great deal happening here at the moment, and Chris is playing a key role in this growth."

Nuttall, who brings experience from his time with Air Studios' game audio department, joins nDreams as it continues work on an as of yet unnamed first-party PS3 project.

www.ndreams.com

Gary Penn of studio **Denki** has launched a recruitment drive suitably eccentric for the developer, which has already seen David Thomson join the team, taking up the title 'number one fan'.

Thomson is in fact expected to assume the role of something similar to PR manager.

Denki has launched a dedicated website for its push to up the number of employers at the company, which takes a rather unusual approach to selecting potential candidates. Visitors to denkiornot.com are greeted by a range of pictures, from which they must select their favourites, ultimately determining their suitability in relation to the studio ethos.

"We were so tired of the same old recruitment adverts and campaigns featuring rendered tits and arses – or their female equivalents," said Penn. "We wanted something more personal, more sensual, more playful, more reflective of us as a company. We wanted something to help us find people who see things the same way we do – DenkiOrNot was it."

www.denki.co.uk

Continuing the trend for welcoming new faces to the fold, the team at **Relentless Software** has been joined by Jonathan Shearn and Giles Armstrong.

Shearn *(left)* has been with the games industry from a young age, helping promote titles like *V2000* and *Wargasm*. His career started in QA at Crawfish, where he turned his hand to several high profile releases including *Street Fighter Alpha 3* and *Ecks vs. Sever*. Since then he has taken his skills to EA, before joining Relentless, again working in QA.

Like Shearn, Armstrong *(right)* comes to Relentless after experience with EA, where he began his career as an online and network tester. Before joining Relentless as media production assistant, Armstrong also spent time working on short films with ITV.

Social gaming specialist Relentless Software is based in Brighton, where it continues to work on unnamed projects outside of its hugely successful *Buzz* quiz show series.

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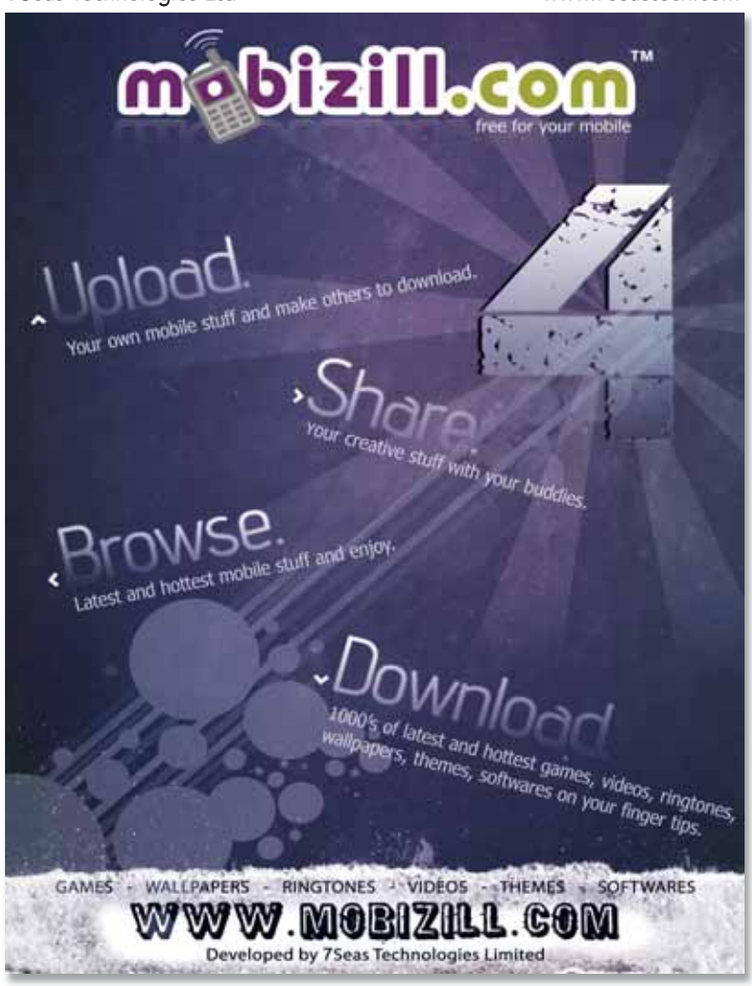
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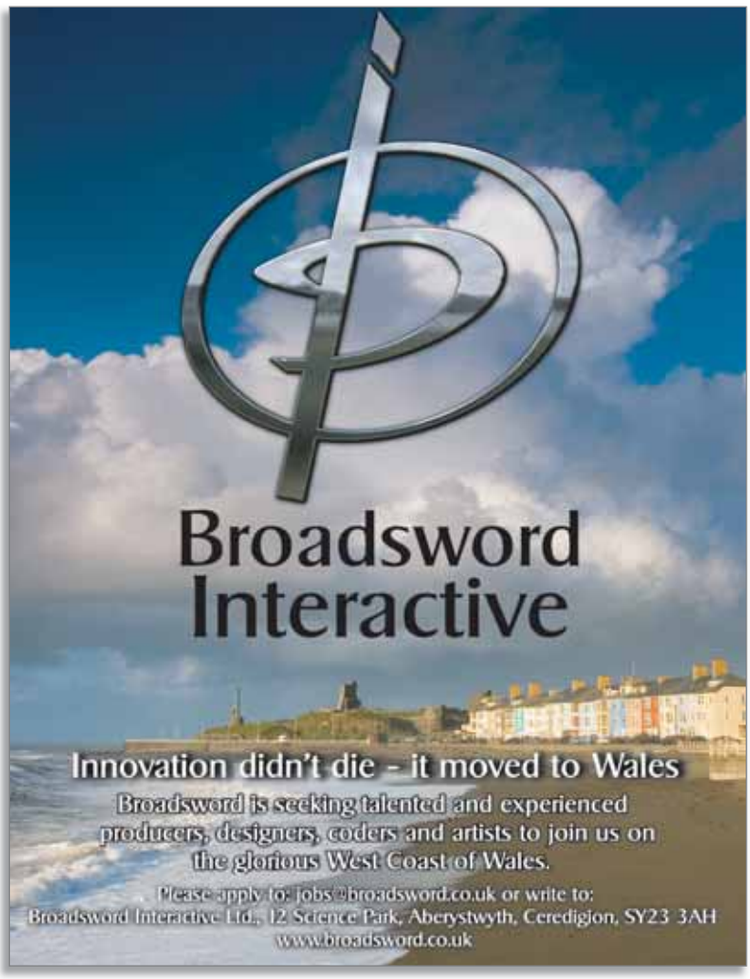
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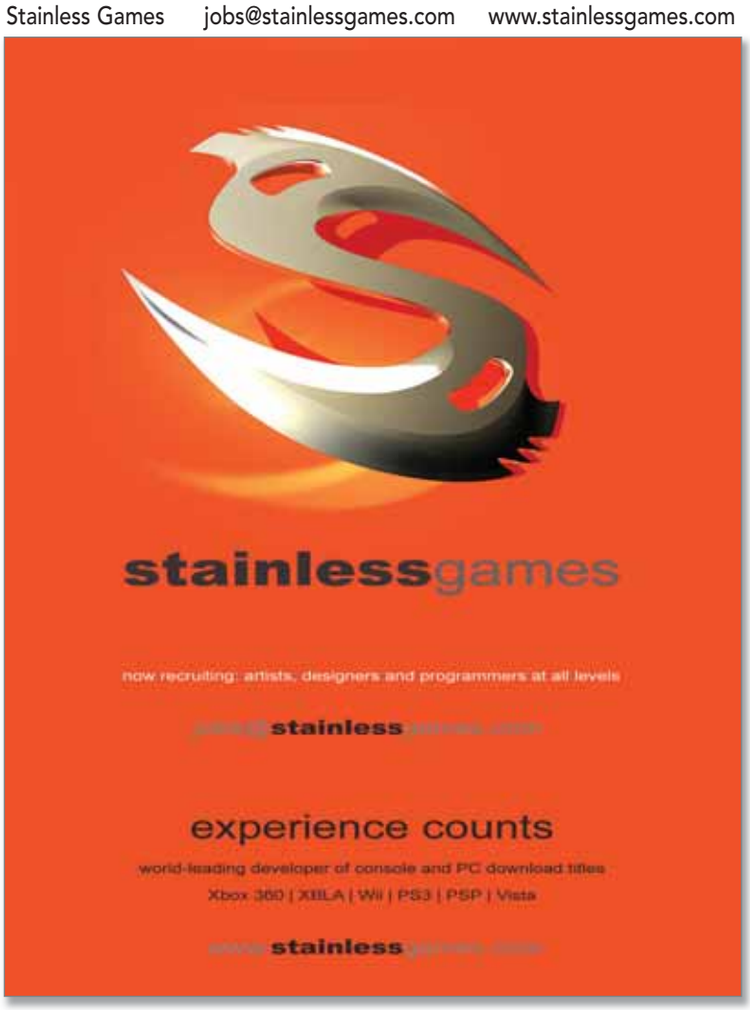
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Tools News

amBX launches free SDK

amBX has made the SDK for its ambient tech free for the first time, opening access to anybody wishing to harness the system.

Previously only made available on a project-by-project basis, the SDK is now freely available from the firm's developer website. The package includes test tools and example applications, and a forum has been established to provide support.

"The amBX SDK provides developers with everything they need to get quickly up to speed and at no charge," said Neil MacDonald, CEO of amBX.

"It makes amBX very approachable and this is a major step forward in game development. The whole point of amBX is to immerse the player deeper into the game and the amBX SDK now allows developers to harness and control the most powerful immersion experience available in their games. The SDK makes a rather complex operation very simple at extremely low cost."

developer.ambx.com

Unity details 2.5 upgrade

Unity Technologies has confirmed the details of the latest upgrade to its Unity Engine, which adds the ability to develop for Vista and XP Windows systems.

The free update features 100 per cent feature parity and interoperability with the Mac version – and games developed with the engine will function on both operating systems automatically.

The 2.5 update also brings significant upgrades to the user interface, such as a new tabbed layout, redesigned components to allow for more intuitive development, and 130 new script hooks for tailoring authoring tools.

3ds Max importing has been significantly improved, with drag and drop for support for all skeletal based animation, multiple UVs and vertex colours. Autodesk's 3ds Max now joins the included support for Maya, Blender, and the other 3D applications that integrate with the Windows platform's FBX plug-in.

Unity Technology's upgrade is currently in beta, and a release for the engine is promised 'soon'.

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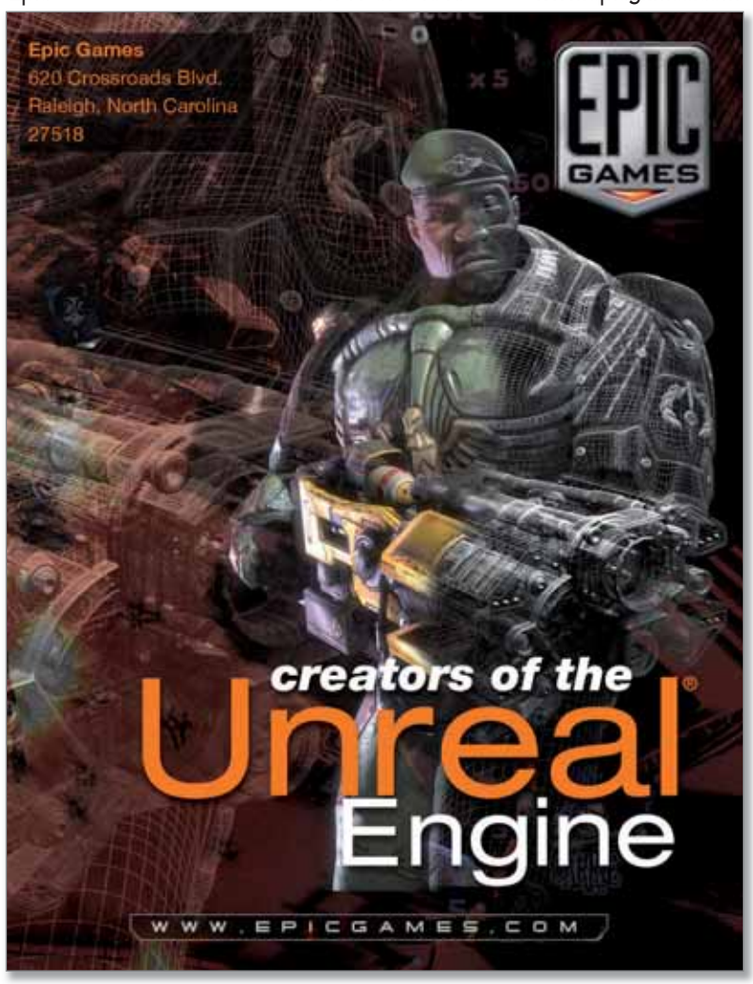

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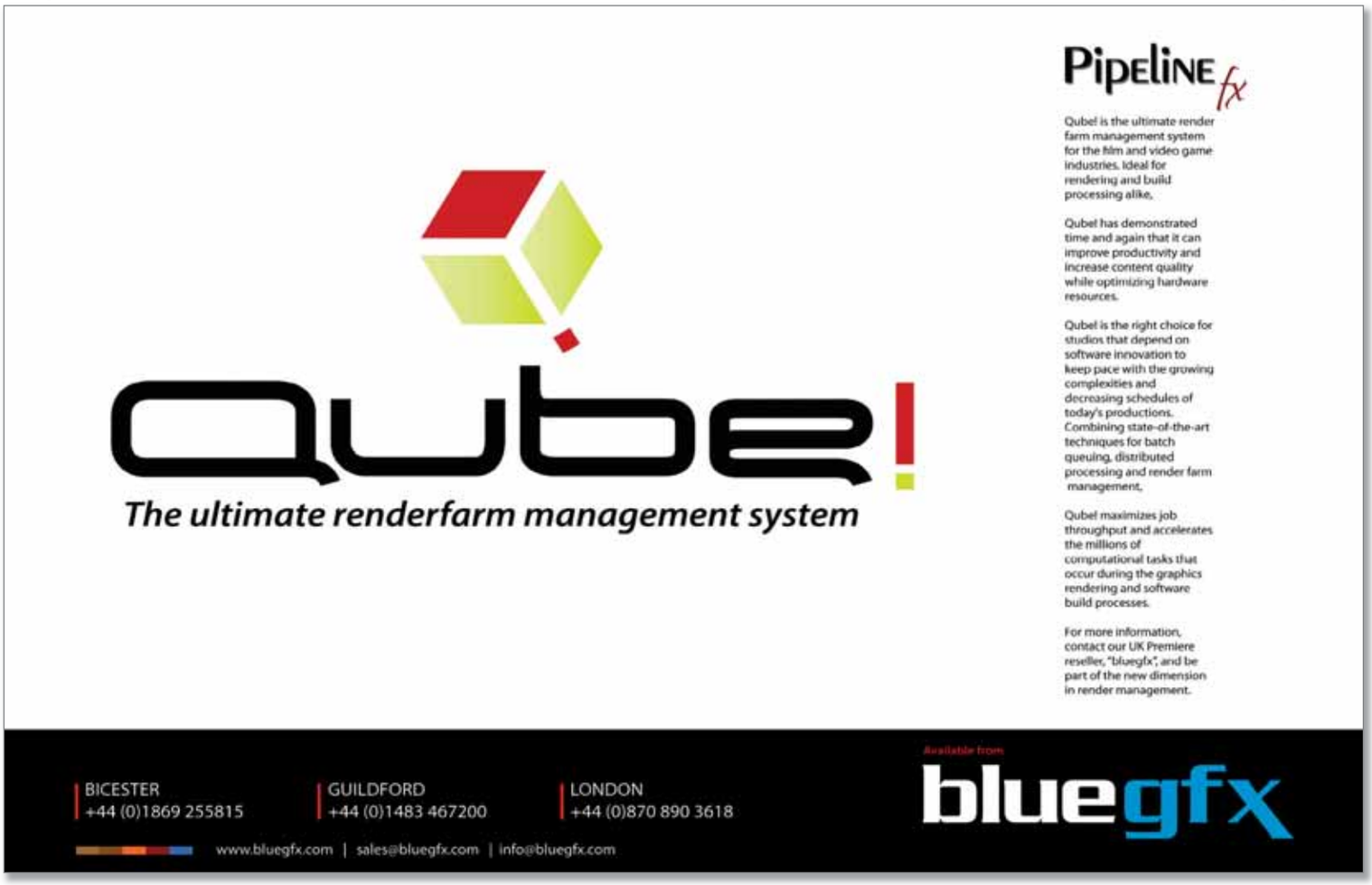
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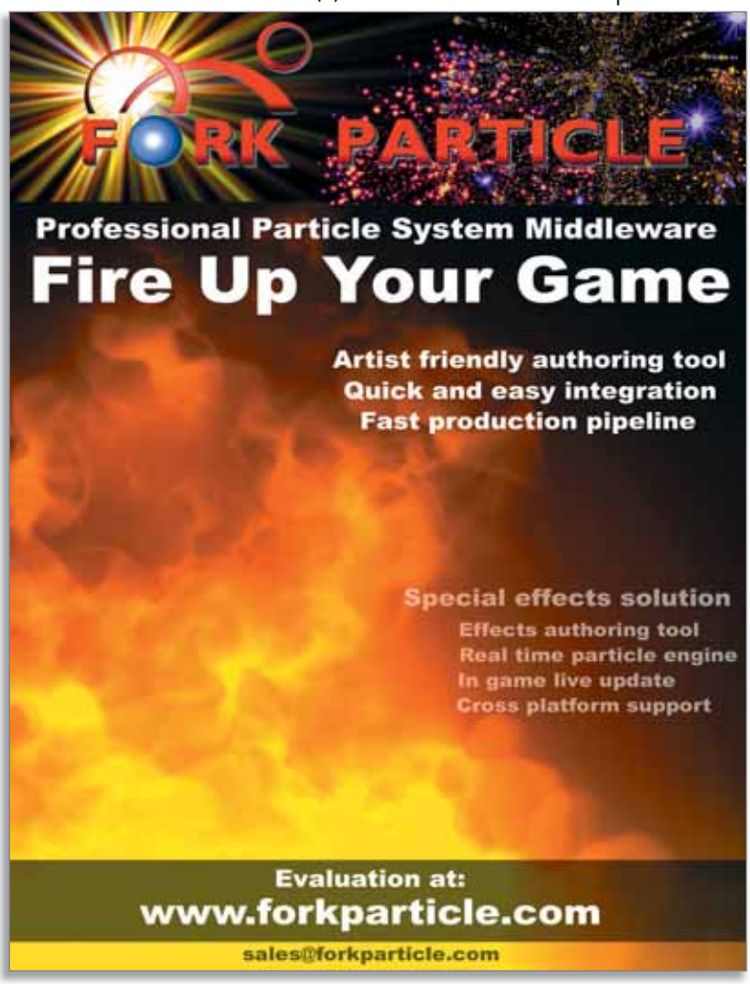

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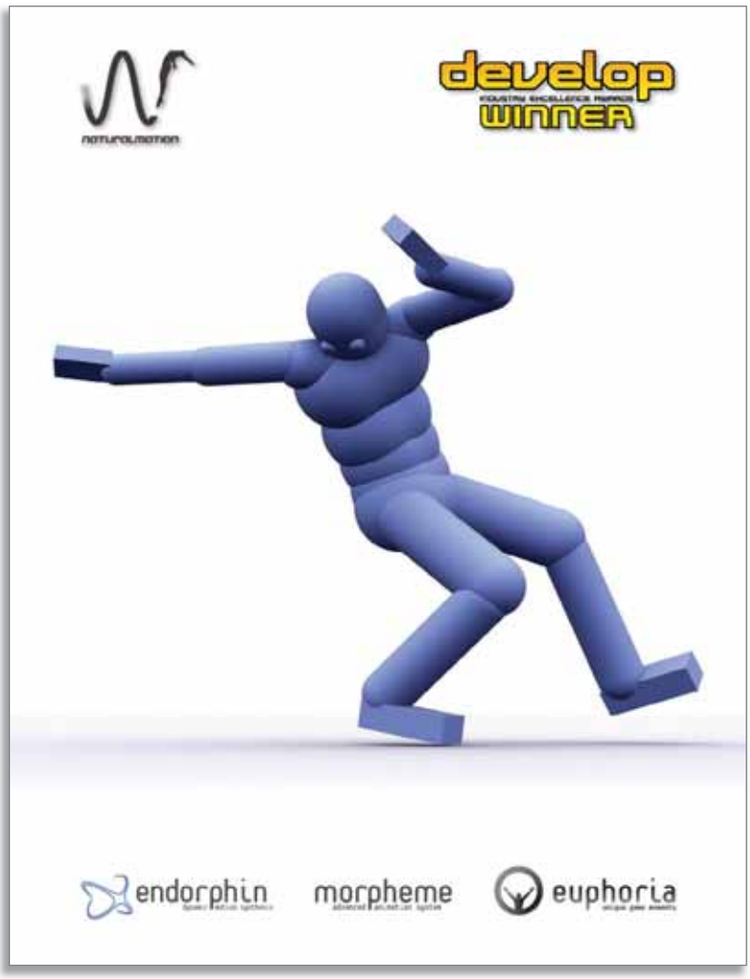

Tool Spotlight

JAVAGROUND XPRESS SUITE

Area: Mobile porting and development
Price: Available on request
Customers: Hudson Entertainment, Indiagames, Sony Pictures, Babel, Capcom

Javaground's Xpress Suite is a set of tools that aims to streamline the development and porting process for the creation of mobile phone games. The technology in place allows for studios working on any given mobile title to produce a complete set of ports for a J2ME and BREW game in just two weeks.

The core part of the suite is the Porting Engine which, when fed source code, can create several hundred Java, BREW, Android and even iPhone builds within just a few minutes, producing only the necessary files for the devices selected.

The toolchain also provides a Universal Emulator, which can apparently be run directly on source code, which can emulate virtually any device – even multiple devices simultaneously to increase productivity.

Next up is the Resource Manager, which can be used to create almost all art assets, using 'specific' image compression algorithms to reduce their size. It even creates source code for the easy implementation of those assets.

Avancys is Javaground's own project management server, aimed at keeping the whole team on top of product life cycles, variants, localisation and more. Designed to withstand heavy user load with very little maintenance required, user accounts can also be created based on role, such as publisher, developer or translator.

Finally, the level editor is designed to facilitate the creation of tile-based levels for 2D games, supporting side-scrolling platformers, overhead RPGs, isometric games and even parallax scrolling, with developer-defined attributes to allow for lively, dynamic game environments.

Attracting a range of high profile customers, Javaground doesn't need to blow its own trumpet. In January Japanese developer Hudson said that using Xpress Suite 'drastically improved' the standards in its mobile gaming output.

"Having a customer like Hudson, one of the most established game companies, is a great testament of the efficiencies brought about by our Xpress Suite in the development of games," says Alex Kral, CEO and co-founder of Javaground.

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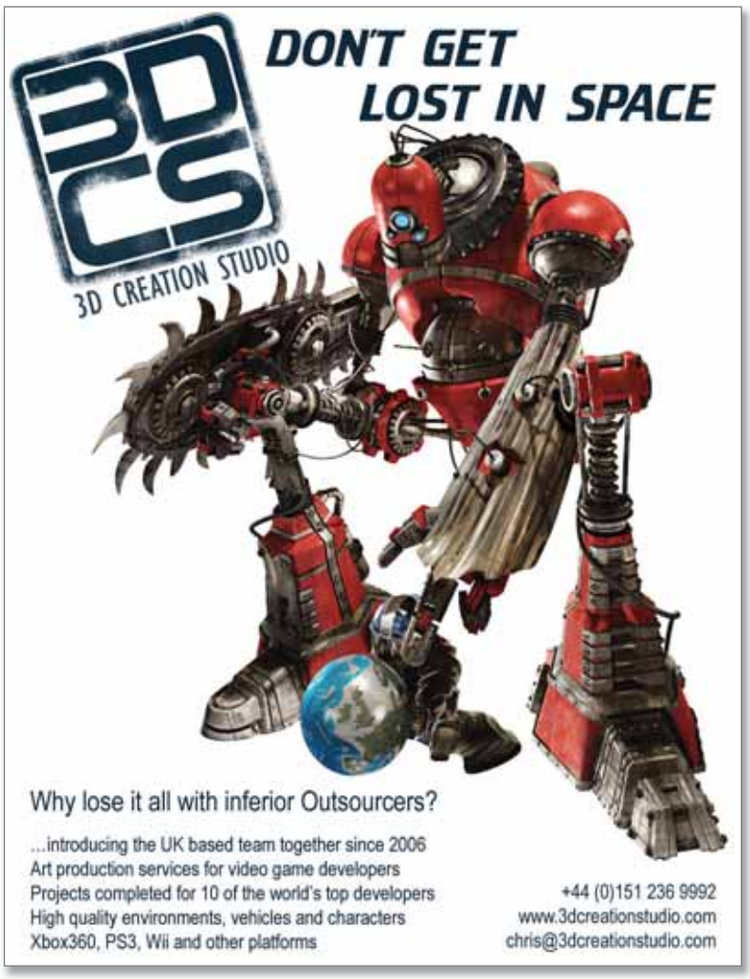
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Services Spotlight

AIR EDEL

Area of expertise: Composition, audio licensing
Location: London and Los Angeles
Clients: EA (*Zubo*), Sony (*Killzone 2*), Atari (*Chris Sawyer's Locomotion*), Codemasters (*Pop Idol*), Koch (*WW2 Frontline Commander*)

Air Edel has over 35 years experience as one of the world's leading music companies, and counts composers, editors and supervisors on its books. The company has offices in central London and Los Angeles and studios equipped with an impressive array of audio equipment.

As well as offering bespoke music composition, which can be realised orchestrally or electronically, Air Edel provides licensing negotiation services, pulling on its time spent working with the film and television industries.

Recently busy on EA's *Zubo* and Sony's *Killzone 2*, Air Edel has previously contributed its audio services to a number of developers and publishers including the likes of Codemasters and Eidos. A catalogue of games from the present day and the early 1990s include the company's work, such as *Flight of the Amazon Queen* and *Pop Idol*.

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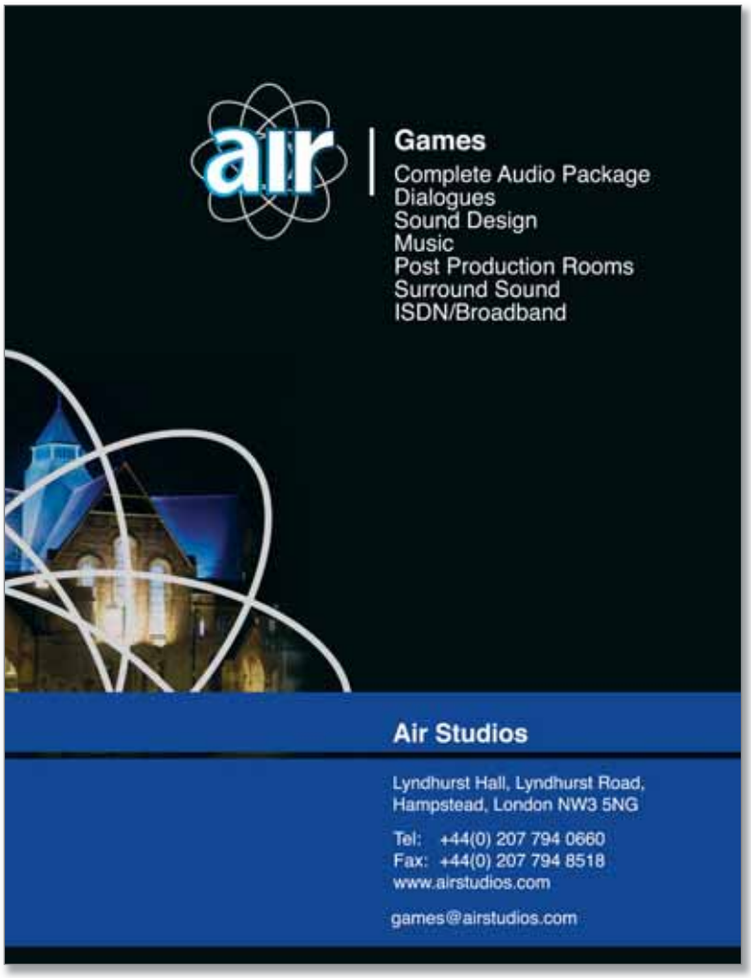

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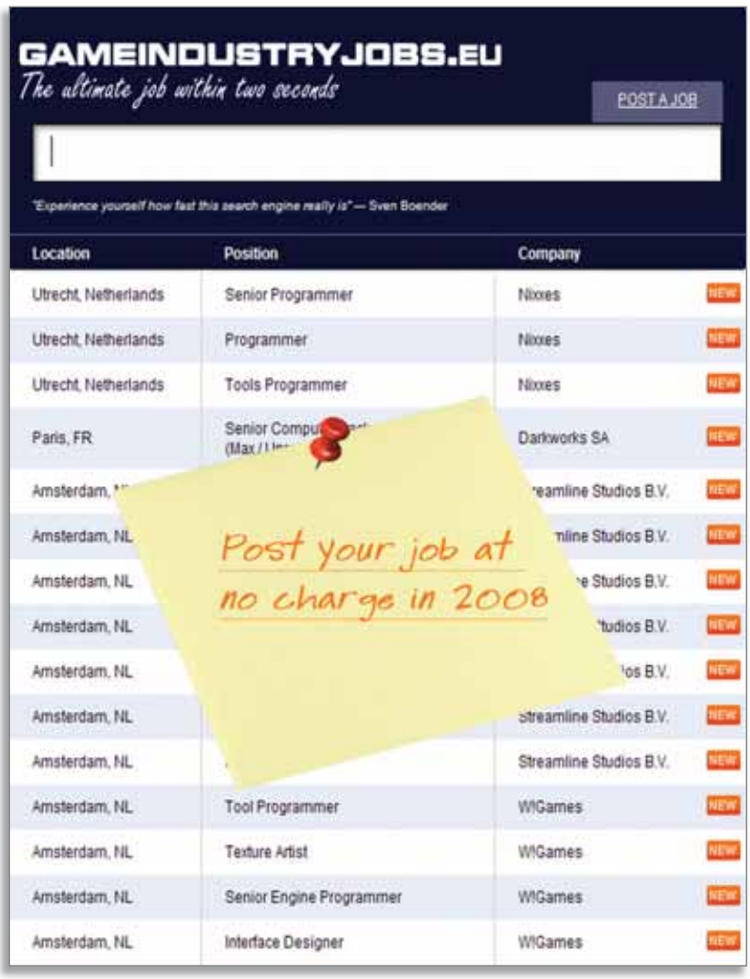

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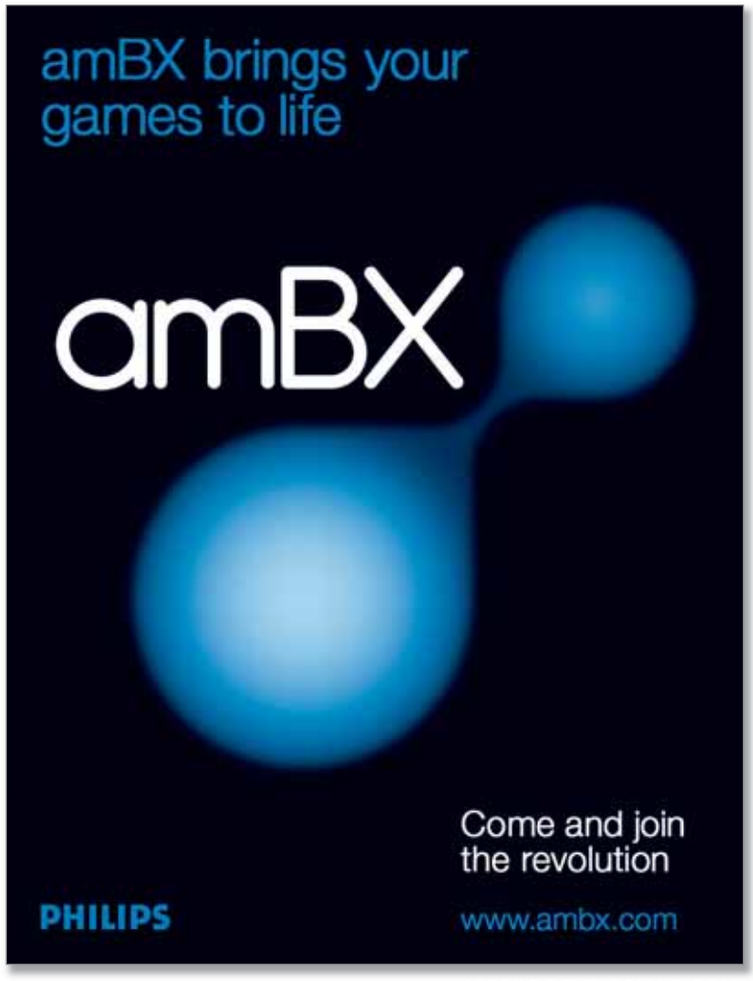

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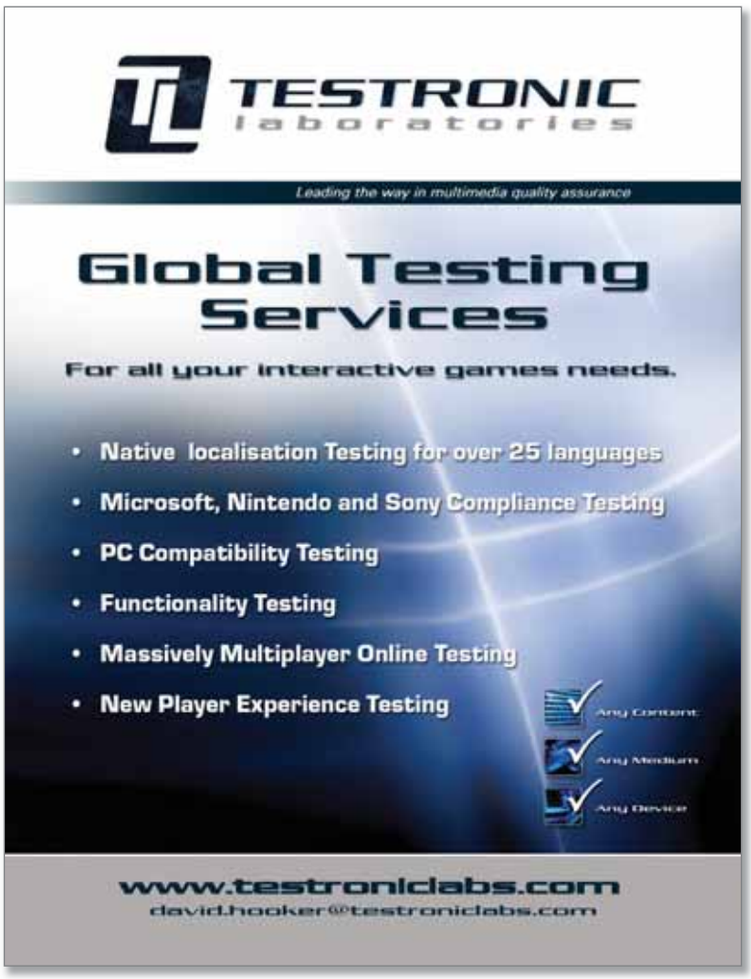

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TRAINING NEWS

New dev team from Swansea Met

Five graduates from Swansea Metropolitan University's computer game development course have formed a new studio named ChaosTrend.

Taking advantage of the expertise at Swansea Met, ChaosTrend has opted to work with Kathryn Penaluna (pictured centre), the 'entrepreneurship fellow' at the university.

ChaosTrend have already released several Flash games, and have completed two commercial commissions for local companies including Telesgop Media.

The developer was founded by Darren Adams and Russell Drodge who handle management responsibilities, while fellow graduates John Franklin, Nick Sinclair and Ian Malsbury provide expertise in coding, design and art work.

A deal has also been finalised with Playfirst.com, who will distribute ChaosTrend games through various websites.

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Letters

If you would like to voice your opinion on any of the content within Develop, please send your letters and comments to the editor at: *michael.french@intentmedia.co.uk*

Ray Maguire
Chairman
BAFTA Games Committee

An open letter to the development community…

When BAFTA announced a couple of years ago that it wished to give the same attention to the art form of the video game as that afforded to film and television, I am sure that there were many raised eyebrows.

While some wondered what took BAFTA so long, others probably questioned whether the Academy had a right to be at the table at all.

As the new chairman of the BAFTA Games committee I want to share our plans and ambitions.

In addition to recognising the highest achievements in video games at our annual Awards, we also aim to give BAFTA members, and the public, a chance to learn first-hand from leading practitioners by showcasing the craft of games production. We aim to provide a forum for knowledge to be shared across all the disciplines the Academy represents.

We are only at the start of our games journey. With just over 150 games members in the Academy out of almost 5,000 members in the UK, we know we have a long way to go, but our ambition is for the Academy's membership to represent the cream of the games development community and to become the place to meet like minded practitioners from film and TV with a view to stimulate and be stimulated by the very best in the entertainment business.

BAFTA is a registered charity with a strong learning and educational remit across all the sectors the Academy represents, and its members frequently participate in mentoring schemes.

"We want key creatives to become members of BAFTA and have a voice…"

We want to attract the real creative, development talent to join the Academy and to mount events which you want to come to and take part in.

We want to put on the best master-classes, lectures, Q&A sessions and creative Awards in the business, to attract the most talented membership and to raise public awareness of this unique art form – and we can only do that in partnership with you.

We want key creatives to become members and to have a voice. We would also really like to hear any suggestions you might have for keynote speakers for the Annual Lecture and how you think the Academy can serve the development community in terms of events. Please feel free to email me at raym@bafta.org.

Aside from the great events and pre-release screenings on offer at the Academy, with a great bar, restaurant and Wi-Fi our headquarters can be like a central London office for out-of-town developers to meet up with publishers – and of course membership is tax-deductible!

If you want to learn more about becoming a member, taking part in a jury, or attending our forthcoming Awards which recognise creative excellence in games, visit the website www.bafta.org, drop me an email or contact Kelly Smith, the Academy's Games officer on 0207 292 5845.

Thanks,
Ray Maguire
Chairman, BAFTA Games Committee
& MD, SCEE UK

Charity fund-raising to honour Richard Joseph

I have recently started a Cancer Charity donation fund in memory of the late games musician Richard Joseph. Richard was, and still is, much loved by his family, friends and fans.

In many ways he was a very special man. His sound work in the games industry is the stuff of legend and for this he will always be remembered.

But to many the abiding memory of Richard is the man, the loyal friend, the good listener, the wicked anarchic humour, the open and creative mind.

For me he will always be one of my few role models, a mentor to the balance of freedom and stability, creativity and business. To me losing him from my life has been like having one of my creative arms cut off for ever.

If you remember Richard, or feel at all moved to make any donation to this cause then please go to www.justgiving.com/jonhare
All donations will be gratefully received.

Donating through Justgiving is quick, easy and totally secure. Cancer Research UK gets your money in the fastest way possible and, if you're a UK taxpayer, Justgiving makes sure 25 per cent in Gift Aid, plus a three per cent supplement, is added to your donation.

Thank you for your support. As you make your donation remember the flame of creative spirit that Richard always carried with him and if it is in your heart then remember to carry this spirit with you too, let it light up your life's work and keep it in a safe place to pass on to later generations.

Jon Hare

THE BYRONIC MAN

It's a sad day for Develop. But just in case you need it spelling out: **Simon Byron's** leaving us...

As far as I can make out, we've degenerated into a nation of gibbering, helpless idiots, absolutely incapable of performing even the simplest of tasks without explicit instruction. Read the next line now.

On Christmas Eve, Radio 5 Live's phone-in show devoted a huge chunk of its time to a section on how to cook a turkey. Presumably prior to this the nation was sat slumped, mouth wide open, weeping in front of the wireless, waiting for some wise soul to reveal the secrets of putting a dead bird in the oven for a few hours. How many people would leave such an important part of their family's festivities to chance, in the hope someone would pop up to make everything better? And did they then remain, bloated and in pain, until an 'expert' appeared the following day to explain how to shit in a toilet properly? Next line.

On Boxing Day, Sky News – news channel of the year, incidentally – stuck a correspondent on Oxford Street to explain the complexities of shops discounting their stock. He issued a warning that these 'sales' didn't mean everything would be cheaper. "If you want to buy some gloves, it may be worth phoning ahead to see whether they're on sale before you leave the house," he advised. Which is something I would have done, but the oracle wasn't kind enough to offer a step-by-step guide to using a 'phone'. And he could have picked an easier example – it's all right for these experts, but how do us ordinary people know which glove goes on which hand? Next paragraph below.

It's getting worse. News stories about Manchester United winger Christiano Ronaldo are always prefaced by the description "Manchester United winger," just in case we get confused between the Manchester United winger Christiano Ronaldo and the mathematician Christiano Ronaldo. And we can't, it seems, understand the concept of anything unless some work experience designer has knocked up a logo for it. The Global Financial Crisis (a world, red arrows going down, Byronic Man crossed out), the unemployment figures (man drinking in a park; Byronic Man crossed out) and The Gaza Conflict (Palestinian face superimposed with an upside-down smiley) – all have their own sort of weird corporate identity. Just so we know what the man on the tellybox is talking about when he's doing the talking about the world and stuff.

"Is there really a subset of people who've bought a new console, unpacked it, set it up, pushed the power button and then couldn't work out that you had to press 'start' to start?"

We are idiots, clearly. According to every game I play these days, I've the memory of a brain-damanged goldfish, unable to retain the fact you can push X to 'interact' beyond a few seconds. So instead of being encouraged to discover these objects in-game ourselves, they're designed to hit us over the head and then stab us in the eyes.

This next sentence is next. Is there really a subset of people who've bought a brand new console, unpacked it, set it up, managed to line up the special shiny disc with the disc-shaped hole and pushed the power button that then couldn't work out that you had to push 'start' to start?

The designers of the shareware novel-fest *100 Classic Book Collection* on DS have been rightly applauded for broadening the console's appeal. But since when did actual books include instructions on how to turn a page in the preface? If you use a DS, I'm reasonably certain you know how to wield a stylus. If you can't work out how to turn a virtual page, shouldn't you really be colouring in books rather than reading them? Keep going.

This is the last paragraph. Beginning a new game should be a moment to savour, but these days the thought of having to sit through a meaningless tutorial level where I learn, again, that pushing the stick that way does that, or double-tapping an enemy makes you attack it fills me with dread. So when we design our difficulty levels, can't we remember that all gamers aren't idiots?

Footnote: You've just finished the last Byronic Man column for *Develop*, as I'm a victim of the Credit Crunch. I hope the pic above has been crossed out so you all understand. Thanks to everyone who's taken the time to send nice things to the email address below. I should have replied, and regret now I didn't. See you! No virus found in this incoming message.

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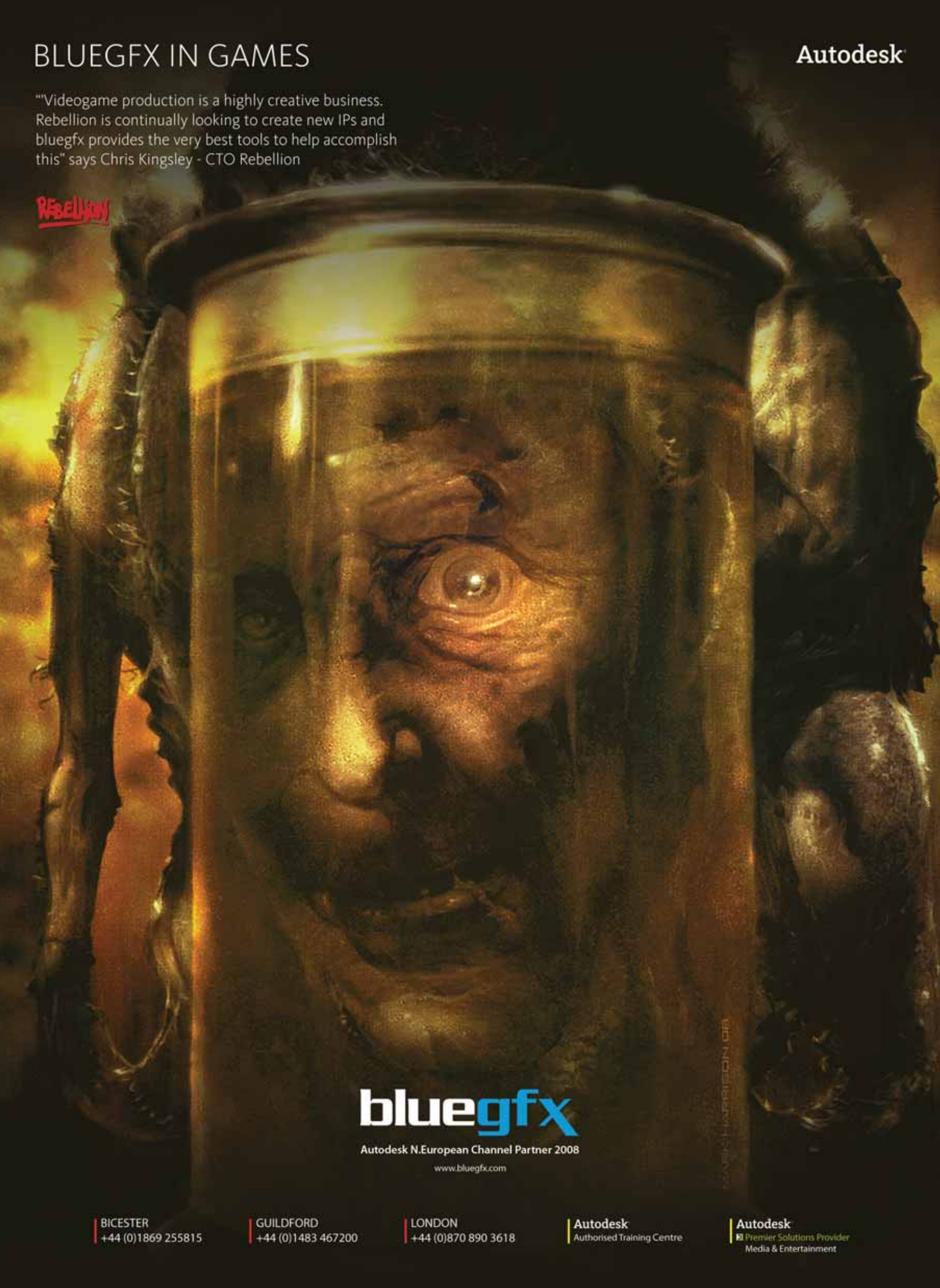

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